

Rolsen

Service Manual

MODEL:RDV-750



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! Caution :
In this Manual, some parts can be changed for improving.

SPECIFICATIONS

Product perform number		Q/JWC RDV-750
Laser		Wave length 650nm
Video		PAL/AUTO/NTSC
Frequency response		20Hz~ 20KHz (±1dB)
Signal/noise ratio		≥95dB
Audio distortion + noise		≤-60 dB (1KHz)
Channel separation		≥85dB(1KHz)
Dynamic range		≥80dB(1KHz)
Output	Audio out (analog audio)	Output level: 2V Load impedance: 10KΩ
	Audio out (digital audio)	Output level: 0.5Vp-p Load impedance: 75Ω
	Video out	Output level: 1Vp-p Load impedance: 75Ω, imbalance, negative polarity
	S-video out	Output level: 1Vp-p Chromaticity (C) 0.286Vp-p Load impedance: 75Ω
	Microphone1/2	Jack type: Ø6.35mm microphone jack Maxi-input level: 10mv Load impedance: 600ohm
Power supply		AC 100~240V 50Hz~60Hz
Power consumption		≤14W
Dimensions		430 x 260 x 38mm
Gross Weight		Around 3.9kg
Net Weight		Around 3.1kg

DVD Audio output standards

Output	Disc type		
	DVD	VIDEO-CD	CD
Analogue Audio output	48/96KHz sampling	44.1KHz sampling	44.1KHz sampling
Digital Audio output	48KHz sampling	44.1KHz sampling	44.1KHz sampling

ADVANTAGES OF THIS PRODUCT

- DVD, VCD, CD, CD-R, CD-RW, MP3, PIC-CD, CD+G playback function
- Integrated remote control
- Multiplex sound playback
- Progressive scan
- Mp3 file playback function
- GUI (Graphical User Interface) OSD (On Screen Display)

By using the [DISPLAY] button on the remote control, information on the DVD/VCD/CD player and disc, can be displayed on the TV screen.
- Screensaver function (DVD)
- 3D sound (3D sound effect using 2 speakers)
- Coaxial digital output (PCM, Dolby Digital, DTS)

You can enjoy high-level digital audio by connecting with amp embedded with Dolby Digital / DTS decoder.
- Built-in Dolby Digital decoder
- Analog audio 5.1-channels output
- Composite video out (x1)
- Slow Forward / Reverse (DVD) playback
- Fast Forward / Reverse playback
- Search of title, chapter, and time in DVD disc, and search of track and time in VCD and CD
- Repeat playback (title and chapter for DVD, track and disc for VCD/CD)
- Repeat a defined period from A to B (DVD)
- Selective Play (DVD/VCD/CD)

You can select and play the desired title / chapter of DVD and track of Video CD
- Various languages OSD (On Screen Display) function (DVD)

You can select and display OSD among various languages. (English, French, Spanish)
- Parental Lock function (DVD)

This function can prevent playback of software that may be unsuitable for children.
- Multi Audio function (DVD)

The audio soundtrack can be heard in up to 8 languages. In the case of SVCD or VCD, it depends on the disc. (The number of audio languages depends on the software.)
- Multi Subtitle function (DVD)

The subtitle can be seen in up to 32 languages. In the case of SVCD or CVD, it depends on the disc. (The number of subtitle languages depends on the software.)
- Multi Angle function (DVD)

This function allows you to choose the viewing angle of scenes which were shot from a number of different angles. (The number of angles depends on the software.)
- Screen zoom function (DVD/VCD)

CIRCUIT OPERATIONAL DESCRIPTION

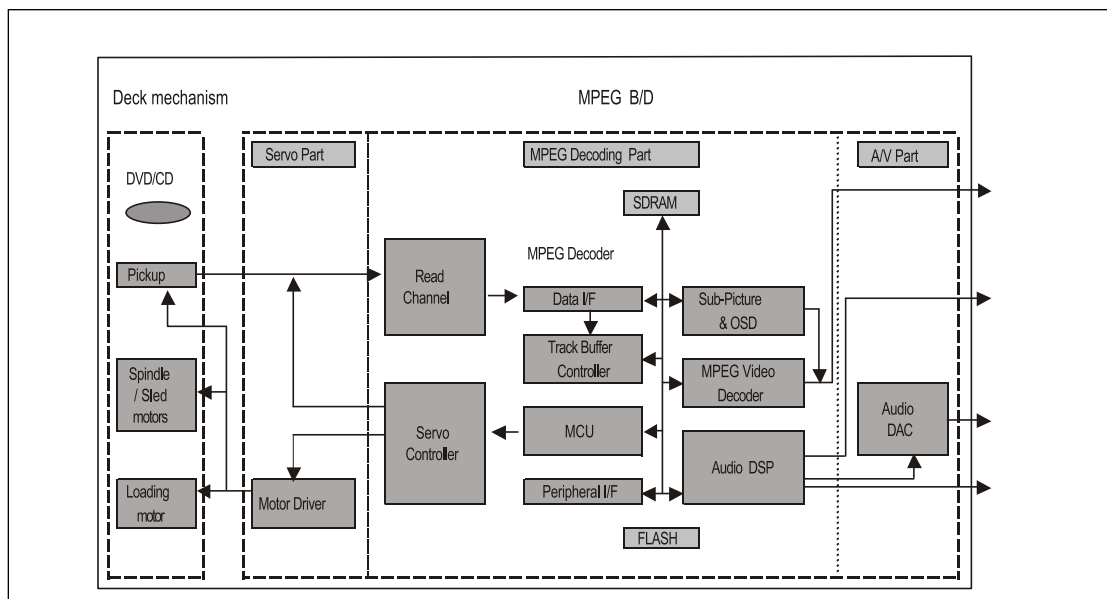
DVD Module

1.Summary

DVD One Board consists of: Loader part that reads and transmits audio and video data saved at Optic Discs (DVD, CD-DA, VCD, CD-R) to MPEG Decoder part; MPEG Decoder part, which, by decoding and encoding data received from the Loader, produces analog signals; and u-Com that controls the overall system including the loader and MPEG decoder.

2.How Does it Operate

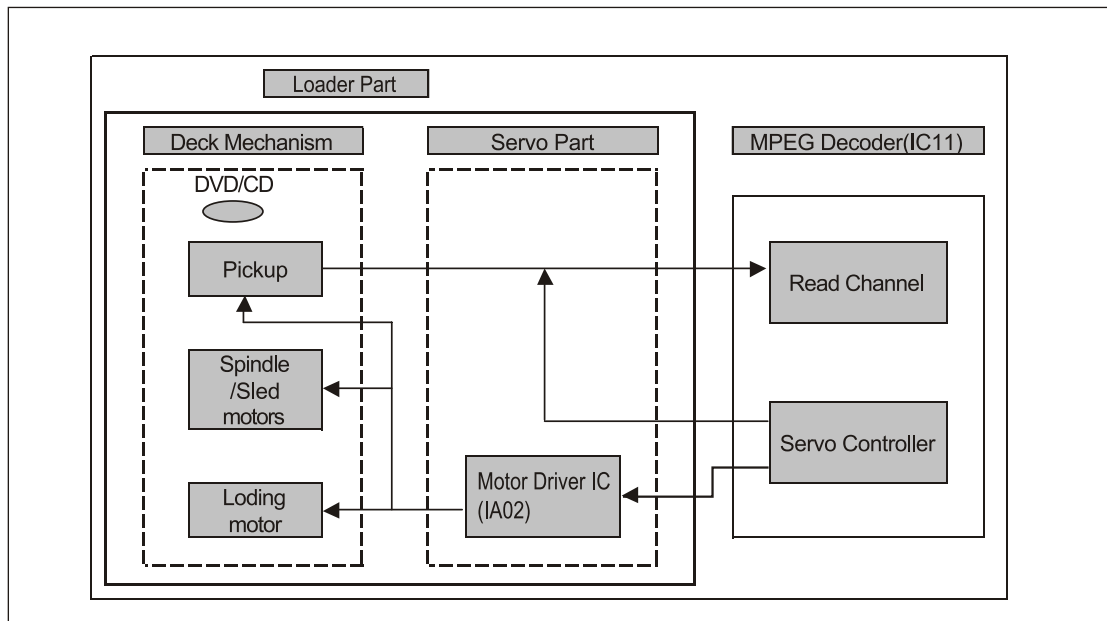
Insert the power cord and then power transmitted to each IC, and the SET will be the STANDBY status which requires the least power for input the front panel key, input the STAND BY/ON key, extinguished the LED. Once the Power On key is entered, u-Com recognizes it and initiates each chipset, performs sequential algorithms such as determining whether the disc is in or not, and if in, what type of disc is loaded. Through this process, it can read disc data before transmitting it to the MPEG Decoder. The MPEG Decoder will then decode and encode such data before generating the final analog audio and video signal outputs.



DVD-MODULE Block Diagram

3.Loader Part

The loader which read the data of audio/video from optic disc and transfer them to MPEG decoder can be divided into Deck total DVD assay(in a short term, Mecha) and Servo. Mecha mounts with the optical pick-up which allows reading the signal of a disc using laser beam and makes it operates and consists of the deck mechanism which allows loading a disc and reading the data. Servo is a sort of circuit which allows operating the loader and recovering the data and consists of Motor Drive IC operating the spindle, the sled, the loading motor.

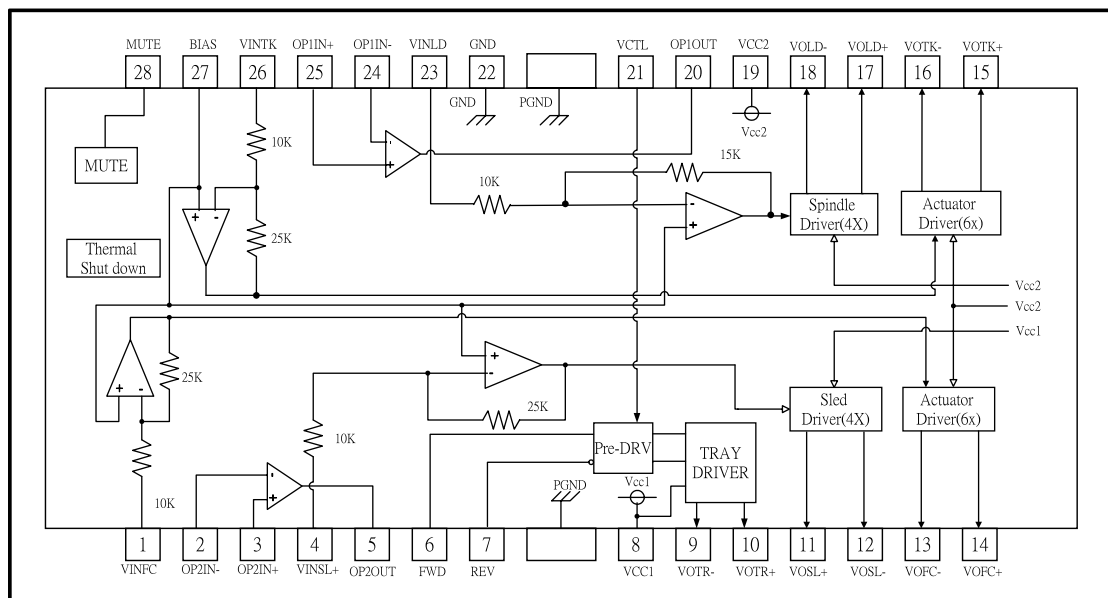


Loader Block Diagram

CIRCUIT OPERATIONAL DESCRIPTION

1) Motor Drive IC: AT5868S

The AT5868S is a 5-channel BTL driver IC for driving the motors and actuators in products such as CD-ROM/DVD-ROM/DVD-Player drives. Two of the channels use current feedback to minimize the current phase shift caused by the influence of load inductance. Driver IC generates the focus signal and the tracking signal for pick-up actuator, the sled signal for feed, spindle signal and the load signal for opening and closing of the tray. The focus signal, the tracking signal, the sled signal and the spindle signal are input into each relaxant port of the drive IC (in the order of No. 26 pin, 23, 4, and 1) and set the gain amplification and the center voltage through the internal OP-AMP and drive on both sides and then the focus signal and the tracking signal will be output as VOFC+, VOFC- and VOTK+, VOTK- on actuator, the sled signal and the spindle signal will be output as VOSL+, VOSL- and VOLD+, VOLD- on each motor. For the load signal the input opening/closing signal is output as VOTR+, VOTR- through the loading PRE FWD REV circuit.



Motor Drive IC (AT5868S) Block Diagram

MPEG Decoder

The signal read from DVD disc is output into the RF signal and Servo related signal through the RF IC and they are input into the MPEG decoder and processed the MPEG decoding and divided into video/audio signal. The video signal is output into the analog audio signal through the built-in encoder block and also the audio signal into the audio DAC through the audio decoder block.

MPEG decoder consists of existing MPEG-2 decoder and single chip combined the digital signal processing part which is the core technology of DVD player with the Servo controller.

1. DVD Servo And MPEG-2/MPEG-4/DIVX Decoder : ES6629

The ES6629 Vibratto™II processor is a highly integrated single-chip DVD solution that integrates read channel, ECC, Servo DSP, MCU, and MPEG-2/MPEG-4/DivX decoder that has a state-of-the-art 480p/576p progressive-scan video feature to provide brilliant and sharp, flicker-free video output to the display, and with built-in gamma correction and S/PDIF input and output support. The ES6629 performs audio/video stream data processing, TV encoding, Macrovision™ copy protection, DVD system navigation, system control, and housekeeping functions.

The Vibratto-II DVD processor is built on the ESS proprietary dual CPU Programmable Multimedia Processor(PMP) core consisting of 32-bit RISC and 64-bit DSP processors and offers the best DVD feature set. The processing units enable simultaneous parallel execution of system commands and data processing to perform specialized encoding and decoding tasks.

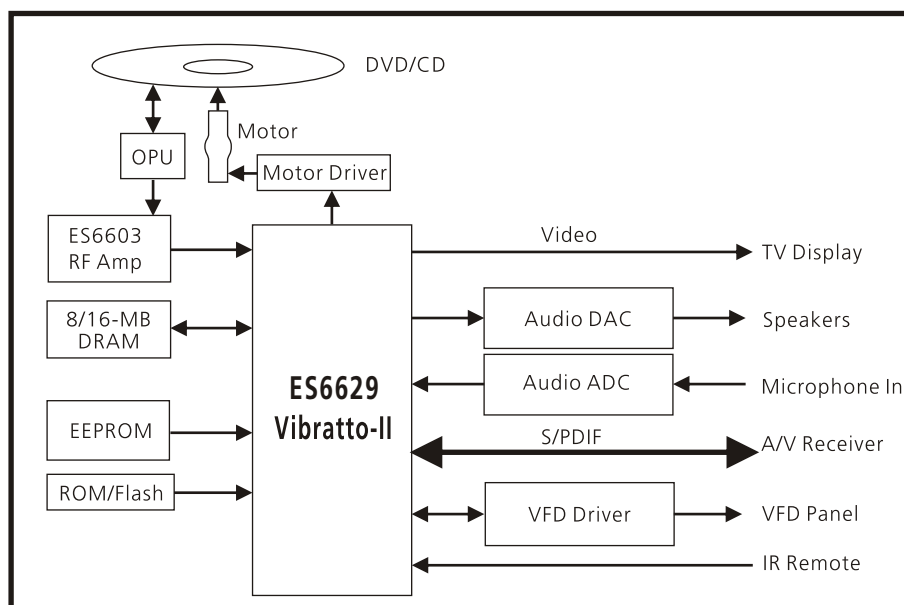
The RISC processor performs bit stream parsing, control audio data output, transfer video and audio data to the vector engine and service system control and housekeeping functions. The vector engine performs audio and video micro-code processing required by A/V standards, such as Dolby Digital®, MPEG and JPEG imaging. These processing tasks include video motion compensation and estimation, loop filtering, Discrete Cosine Transforms(DCT), inverse DCT, quantization, and inverse quantization.

The Vibratto-II DVD processor supports all popular pick-up units, industry standard I²S audio data input and output, EPROM and DRAM access. It also supports both letterbox and pan-and-scan displays, sub-picture overlay, and On-Screen Display(OSD).

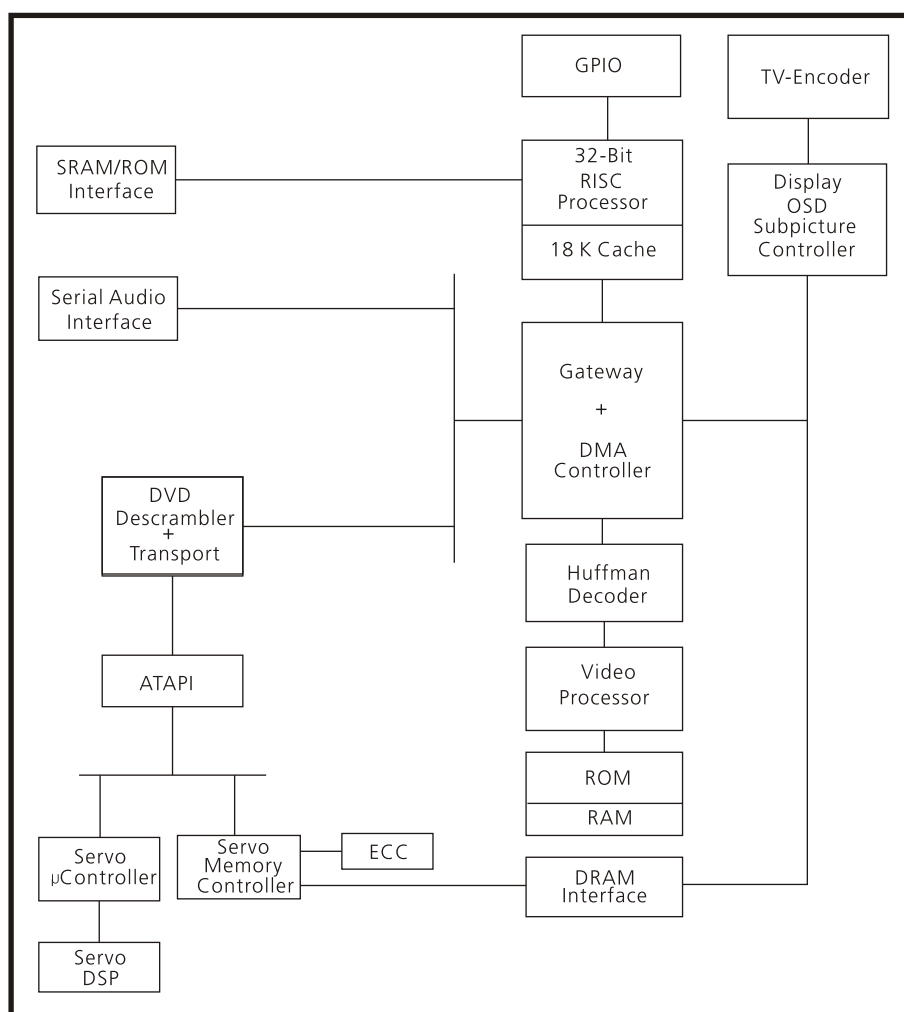
The Vibratto-II's Unified Memory Architecture enables the lowest possible system memory cost by consolidating multiple memory subsystems into a single unit.

In addition, the Vibratto-II DVD solution offers support for Karaoke CD+G, DVD-Audio, HDCD, CD-DA, Mp3, and WMA.

CIRCUIT OPERATIONAL DESCRIPTION



ES6629 Vibratto-II system Block Diagram



ES6629 Vibratto-II Block Diagram

2. DVD Servo AFE IC : ES6603

The ES6603 is a high-performance, single-chip analog front-end (AFE) device that contains the servo functions, RF attenuator, automatic gain controller (AGC), and programmable equalizer/filter for a DVD player system, and dual auto laser power control circuit to support twin pickups or twin laser systems.

The ES6603 incorporates a bi-directional serial port for accessing the programmable functions of the internal AGC, including attenuation and boost/equalization.

The DVD servo block of the ES6603 includes mirror detection, defect detection, dual auto laser power control, focus error, center error, and tracking error detection circuits. The ES6603 provides AC-coupled voltage inputs for photo detector signals used to detect center error, focusing error, tracking error, and differential phase tracking error detection for DVD.

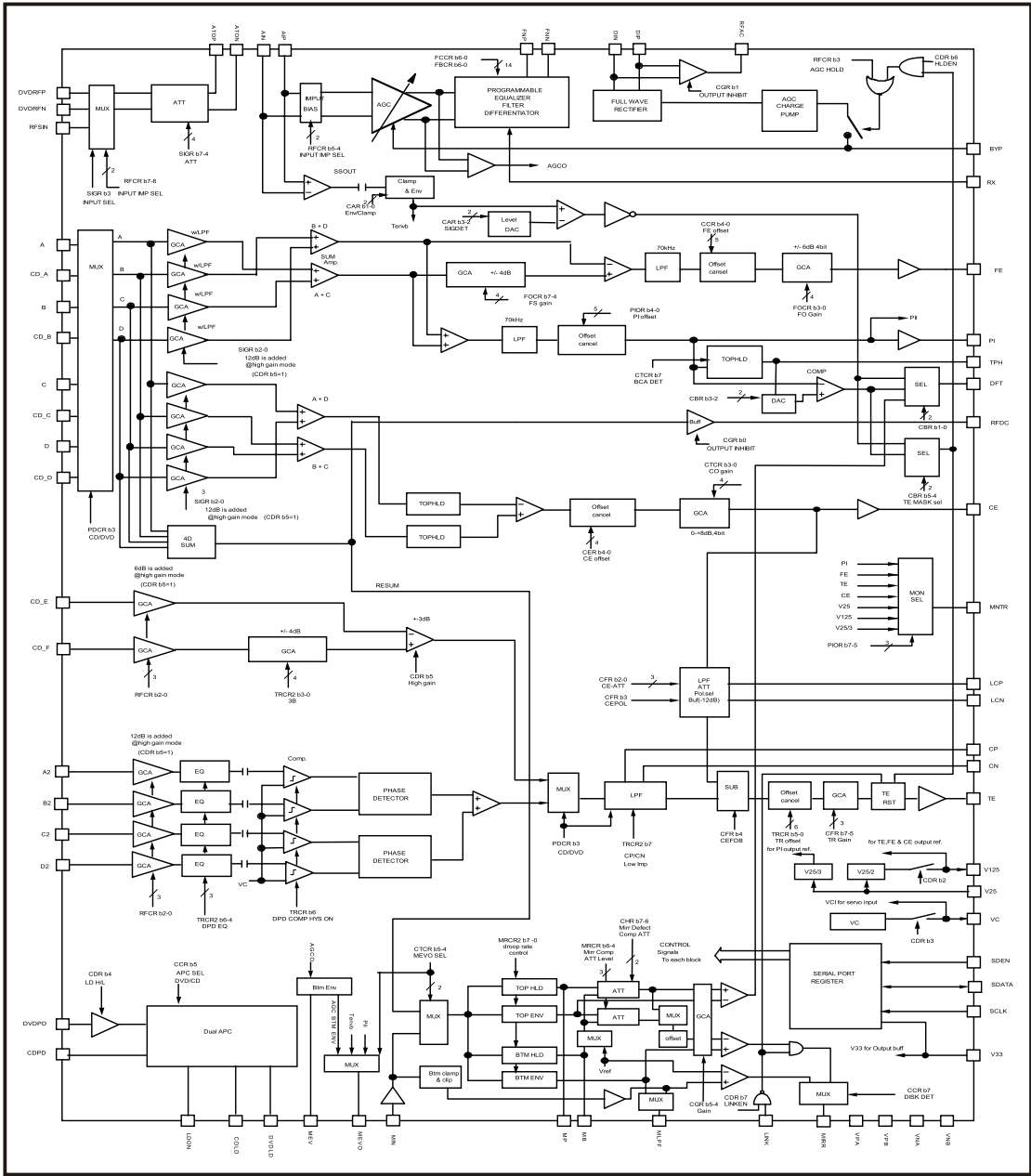
The ES6603 also provides an AC-coupled differential or single-ended RF signal input to the programmable attenuator with external AC coupling circuitry, and an AC-coupled single-ended input for RF signals. The attenuator outputs are AC-coupled to the AGC inputs. The AC-coupled DVD and CD inputs are multiplexed in the input stage for accurate error detection.

The programmable bandwidth and boost/equalization of the ES6603 is provided by internal 7-bit control DACs, while a variable attenuator is used to program the zero locations. The programmable bandwidth and cutoff range are set by the filter cutoff DAC. Signal equalization with the programmable filter is supported with a wide bandwidth fullwave rectifier and a dual rate charge pump.

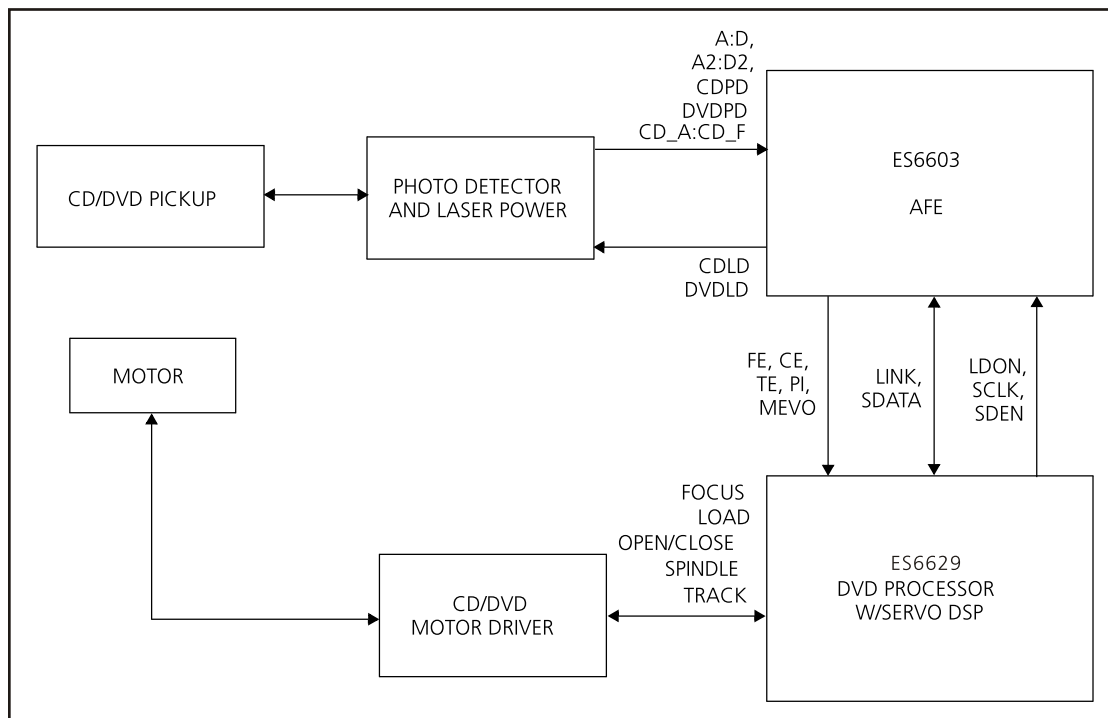
The ES6603 also provides inputs for its internal RF summing mode. These inputs have the gain control amplifiers at the input stage. The gain is controlled by the register bit settings of the serial port.

The ES6603 is available in an industry-standard 64-pin low-profile quad flat pack (LQFP) package.

CIRCUIT OPERATIONAL DESCRIPTION



DVD Servo AFE IC : ES6603 Block Diagram



ES6603/ES6629 Block Diagram

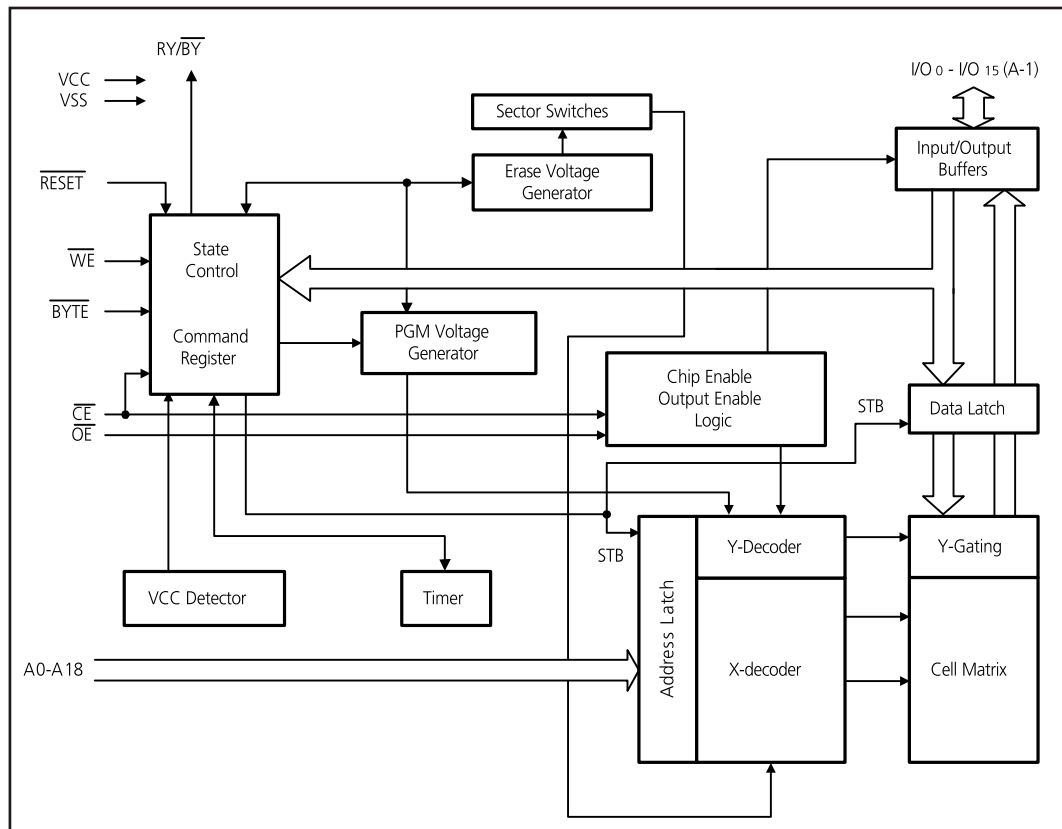
CIRCUIT OPERATIONAL DESCRIPTION

3. Flash Memory : A29800UV-70(A29800TV-70/AT49F8192AT/HY29F800ABT-70)

This stores every program required for the operation of DVD player and holds the data of OSD languages and LOGO and send them upon request from u-COM. This allows the update of firmware by CD-R/RW. For DVD module.

Description

The A29800UV-70 is a 5.0 volt only Flash memory organized as 1048,576 bytes of 8 bits or 524,288 words of 16 bits each. The A29800UV-70 offers the RESET function. The 1024 Kbytes of data are further divided into nineteen sectors for flexible sector erase capability. The 8 bits of data appear on I/O₀- I/O₇ while the addresses are input on A1 to A18; the 16 bits of data appear on I/O₀~I/O₁₅. The A29800UV-70 is offered in 44-pin SOP and 48-Pin TSOP packages. This device is designed to be programmed in-system with the standard system 5.0 volt VCC supply. Additional 12.0 volt VPP is not required for in-system write or erase operations. However, the A29800UV-70 can also be programmed in standard EPROM programmers.



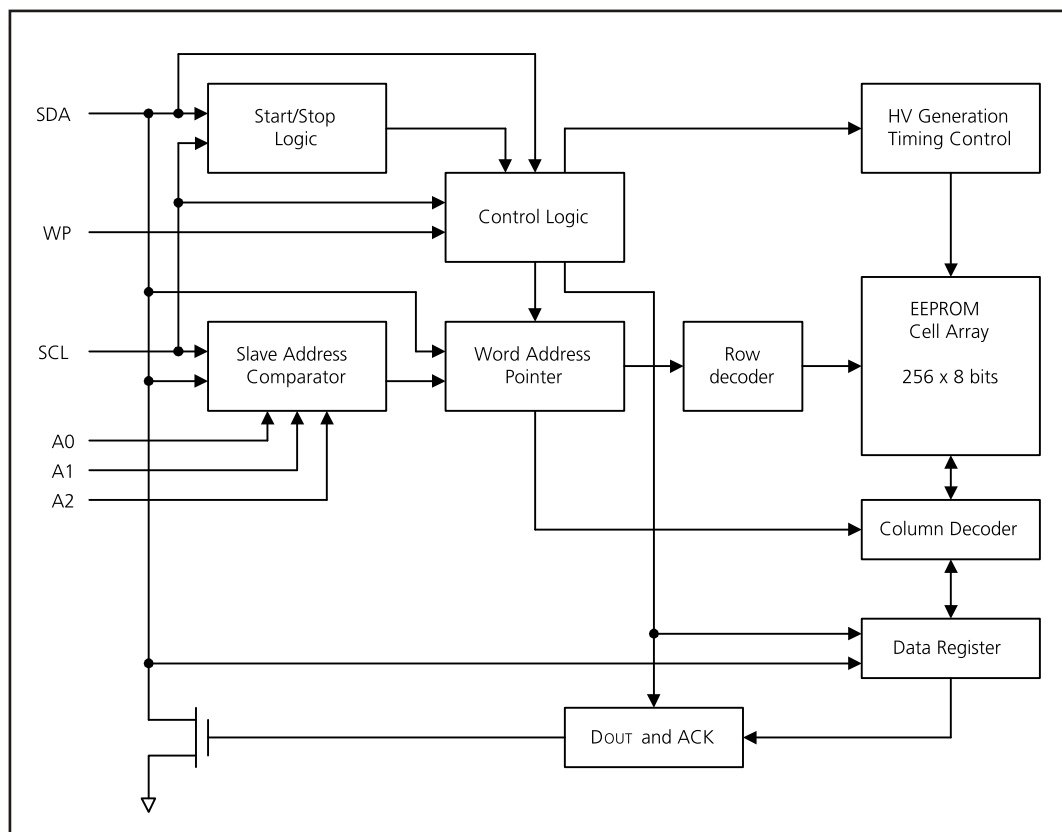
A29800UV-70 Block Diagram

4. EEPROM : S524C20D21(HT24LC02)

This stores the information related to setup of DVD menus. This can read and write the optional information such as OSD, voice, language option after function for subtitle etc, the aspect or method of TV display, video option like display function and audio, screen saver, parental function through the I²C transmission method.

Description

The S524C20D21 serial EEPROM has a 2,048-bit (256 byte) capacity, supporting the standard I²C™-bus serial interface. It is fabricated using Samsung most advanced CMOS technology. One of its major feature is a hardware-based write protection circuit for the entire memory area. Hardware-based write protection is controlled by the state of the write-protect (WP) pin. Using one-page write mode, you can load up to 16 bytes of data into the EEPROM in a single write operation. Another significant feature of the S524C20D21 is its support for fast mode and standard mode.



S524C20D21 Block Diagram

5. SDRAM : HY57V641620HGT-H(HY57V641620HGT-55)

This sends and receives data with MPEG decoder and performs the video signal processing. Every video signal output from DVD player is once stored in SDRAM and then encoded in MPEG decoder and finally output into the analog signal.

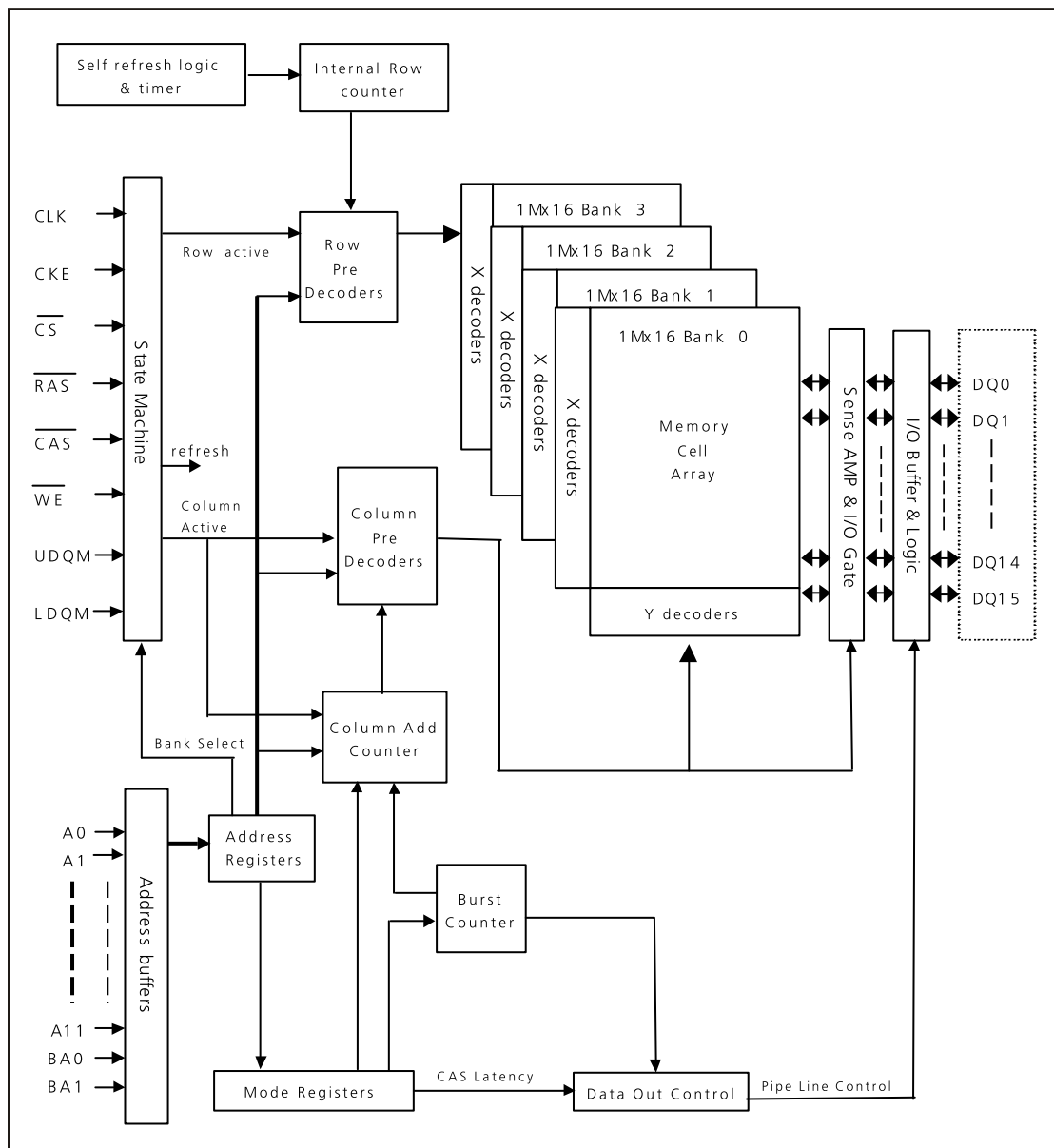
SDRAM applied to DVD module has the capacity of 64MBit(1048576 x 16bit x 4Bank), sends and receives data with MPEG decoder by 16 bit.

Description

The Hynix HY57V641620HGT-H is a 67,108,864-bit CMOS Synchronous DRAM, ideally suited for the main memory applications which require large memory density and high bandwidth. HY57V641620HGT-H is organized as 4banks of 1,048,576x16.

HY57V641620HGT-H is offering fully synchronous operation referenced to a positive edge of the clock. All inputs and outputs are synchro-nized with the rising edge of the clock input. The data paths are internally pipelined to achieve very high bandwidth. All input and output voltage levels are compatible with LVTTTL.

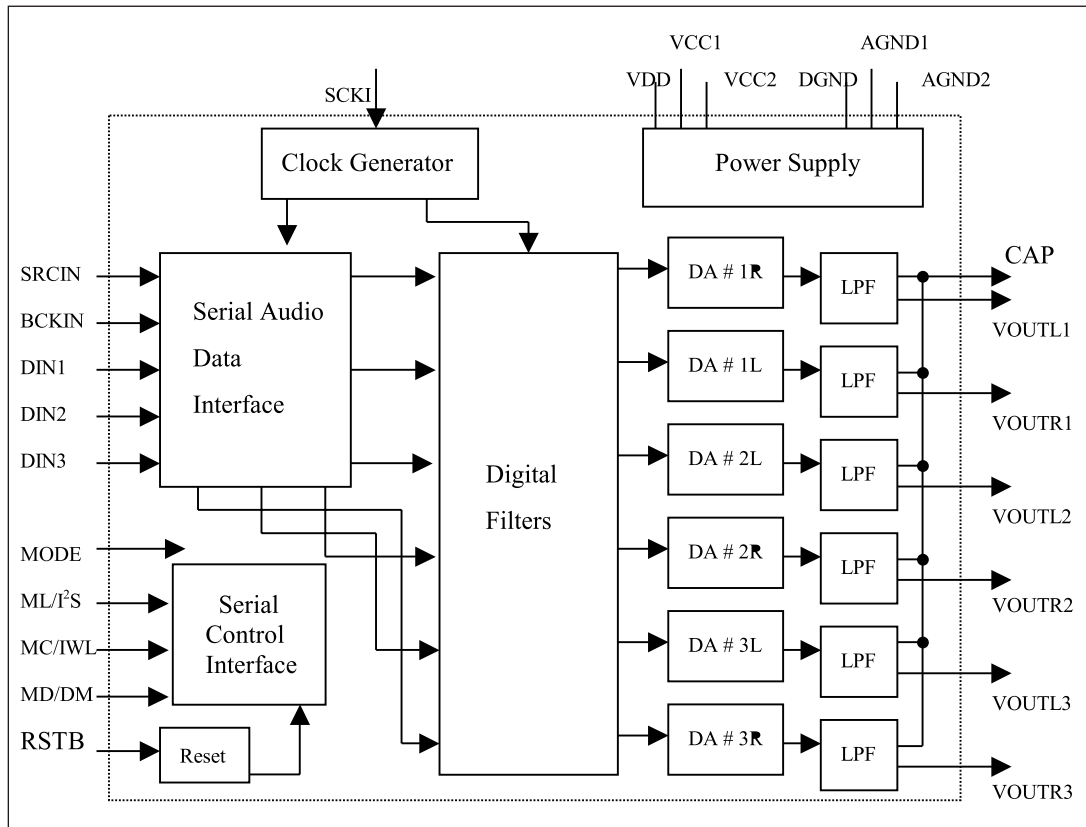
Programmable options include the length of pipeline (Read latency of 2 or 3), the number of consecutive read or write cycles initiated by a single control command (Burst length of 1,2,4,8 or Full page), and the burst count sequence(sequential or interleave). A burst of read or write cycles in progress can be terminated by a burst terminate command or can be interrupted and replaced by a new burst read or write command on any cycle. (This pipelined design is not restricted by a `2N` rule.)



HY57V641620HGT-H Block Diagram

6. DAC : DA1196

DA1196 is a digital to analog converter especially designed to work with MPEG2/AC-3 decoded data in applications such as, DVD player, home theater, set-top box, and digital TV, etc. DA1196 integrates 6 DA channels providing customers a solution of both simplicity and excellent performance.



DA1196 Block Diagram

VOLTAGE CHARTS

Power board output voltage

J1

Pin number	1	2	3	4	5	6	7	8	9
Output voltage	GND	S5V	3.3V	D5V	GND	A5V	GND	+12V	-12V

J2

Pin number	1	2	3	4	5	6
Output voltage	SW	F-	F+	GND	-24V	STB5V

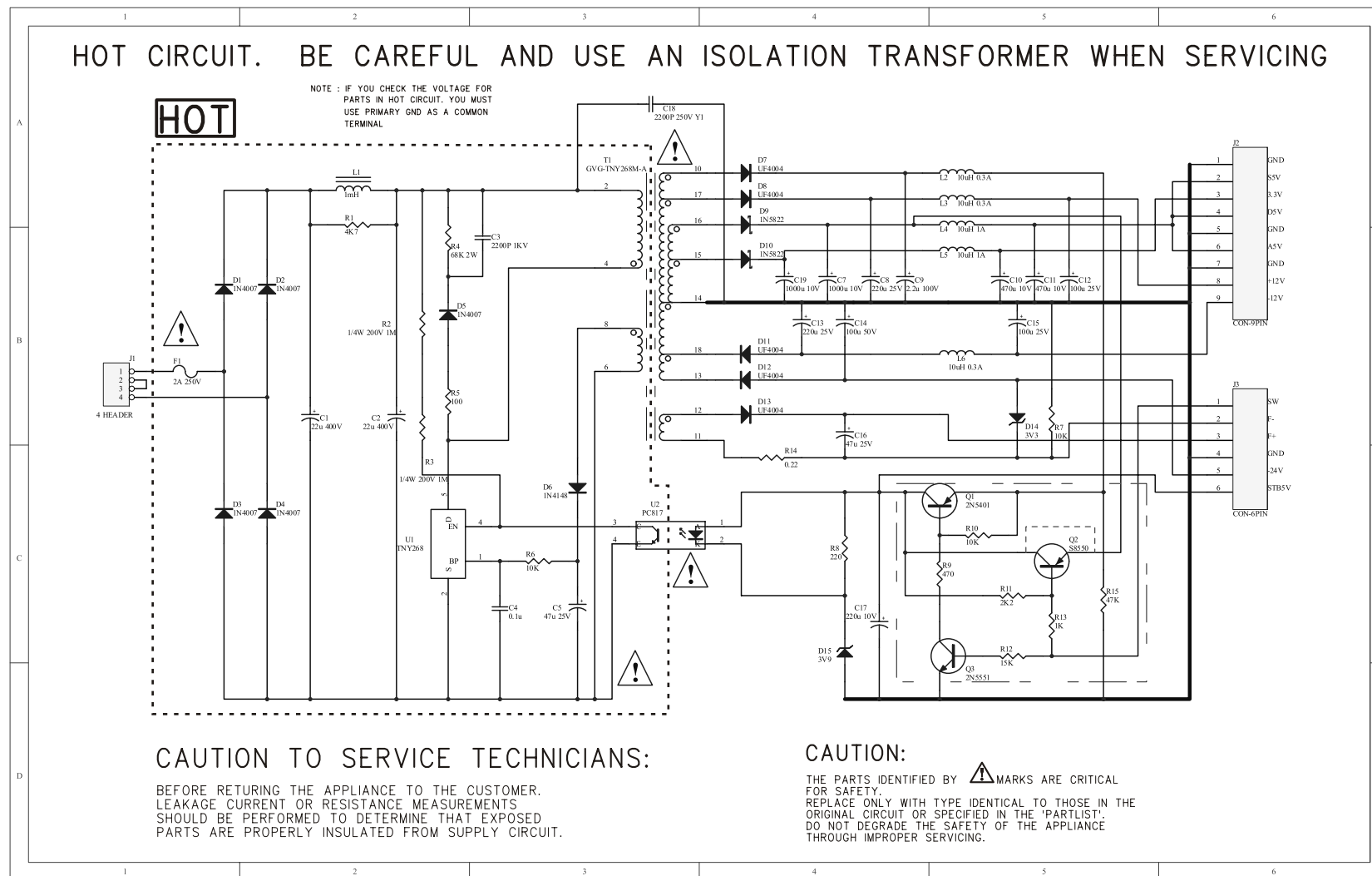
Decode board input voltage

CN1

Pin number	1	2	3	4	5	6	7	8	9
Output voltage	GND	S5V	3.3V	D5V	GND	A5V	GND	+12V	-12V

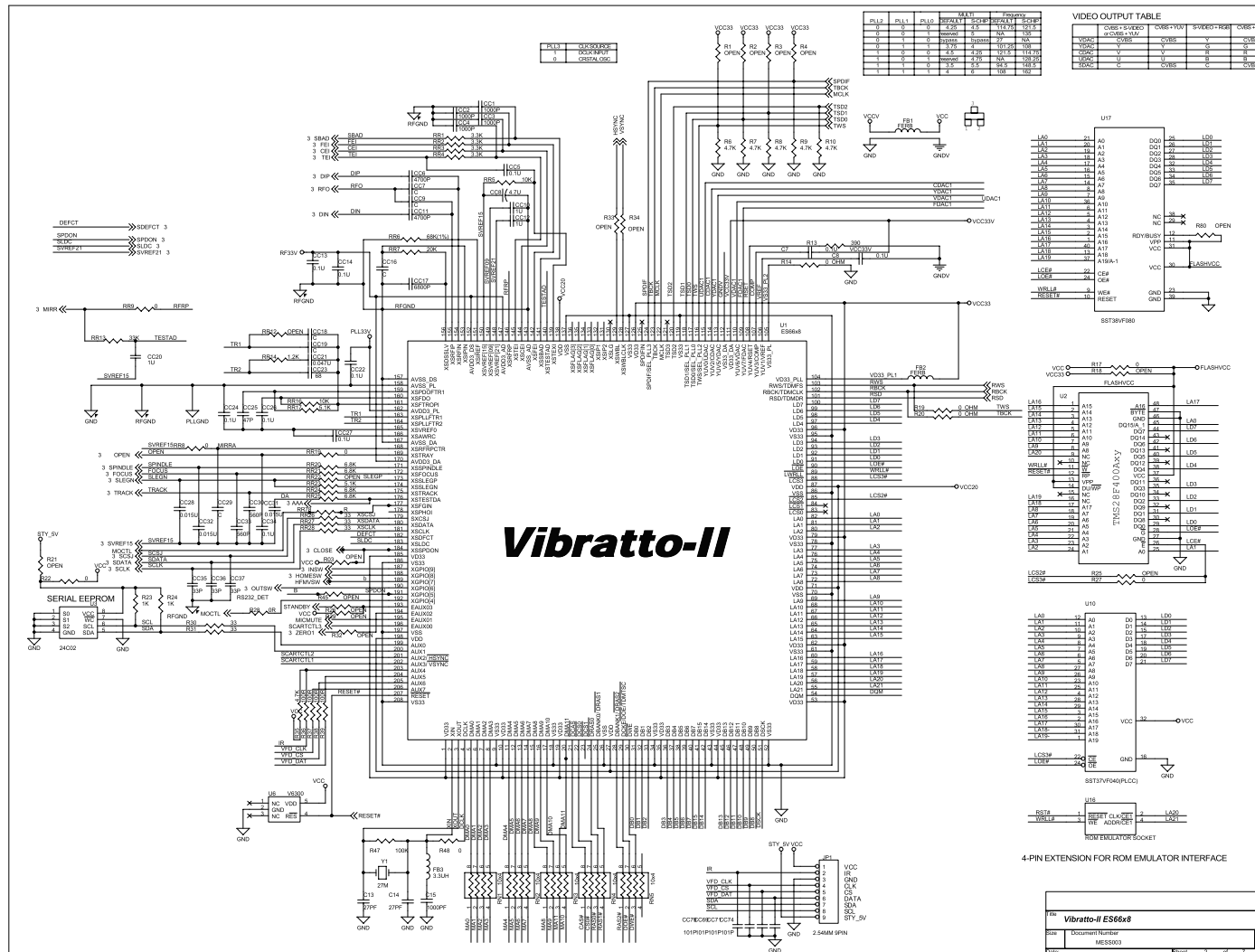
CIRCUIT DIAGRAM

1. POWER SUPPLY SCHEMATIC DIAGRAM

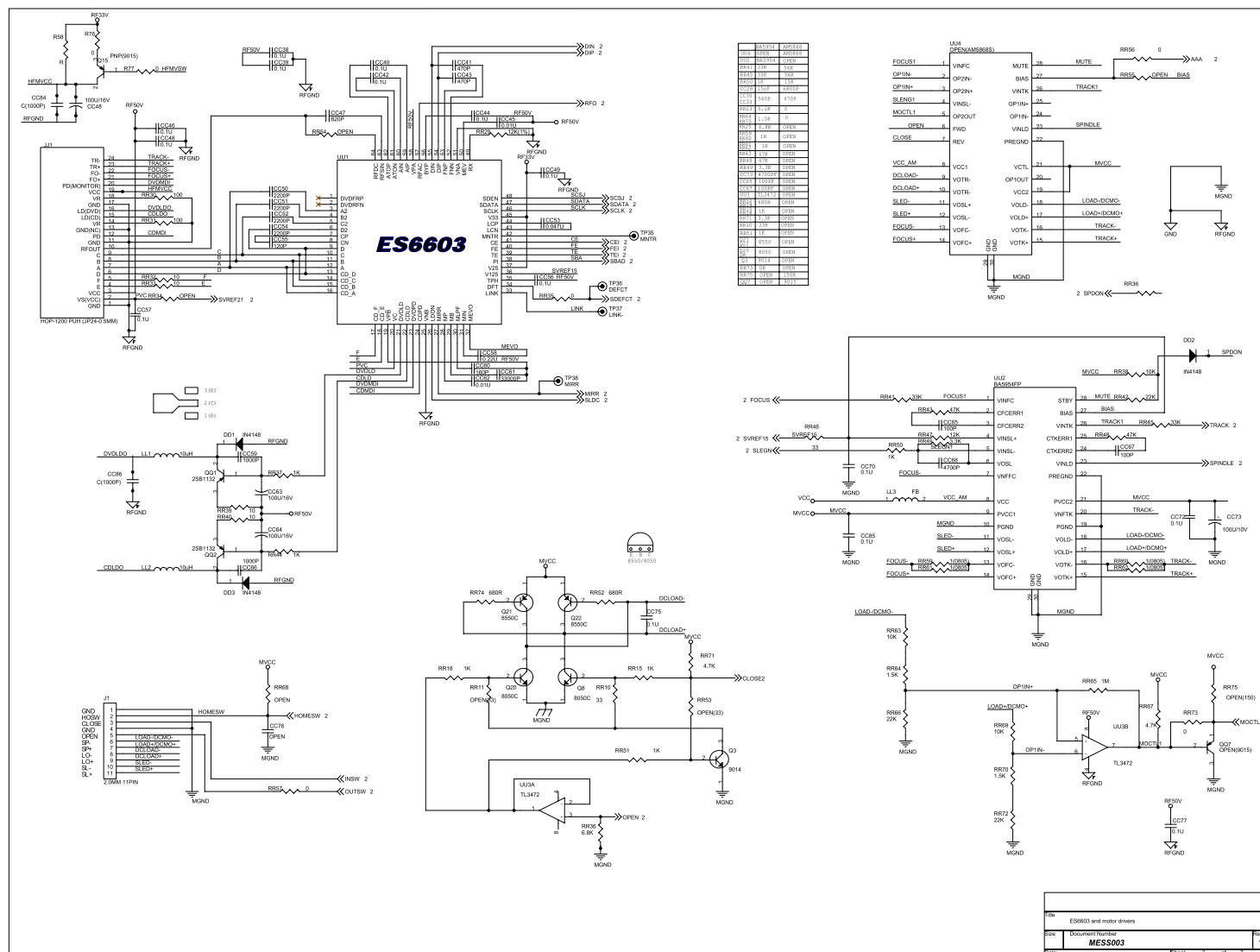


2. DECODE BOARD SCHEMATIC DIAGRAM

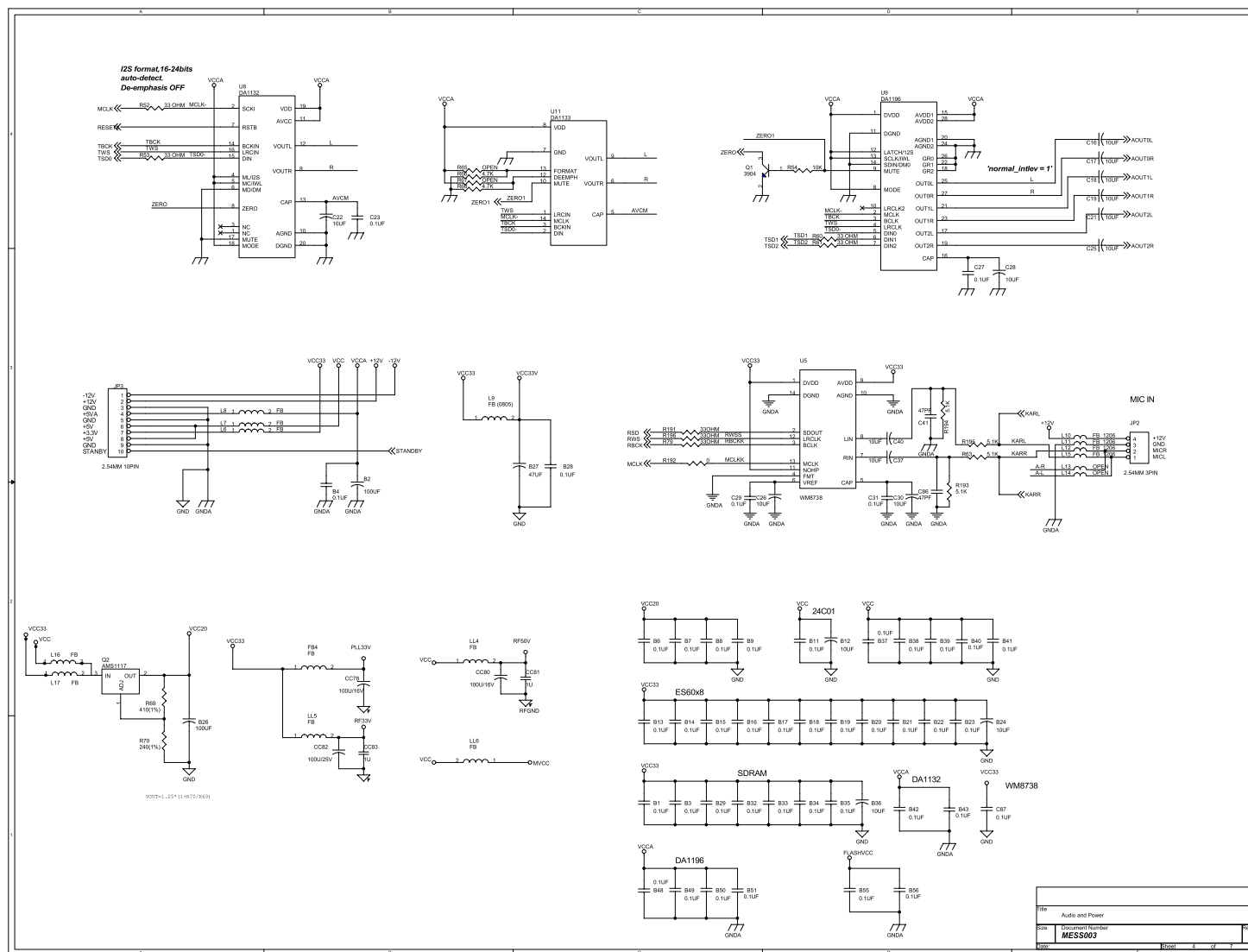
1) Vibratto-II



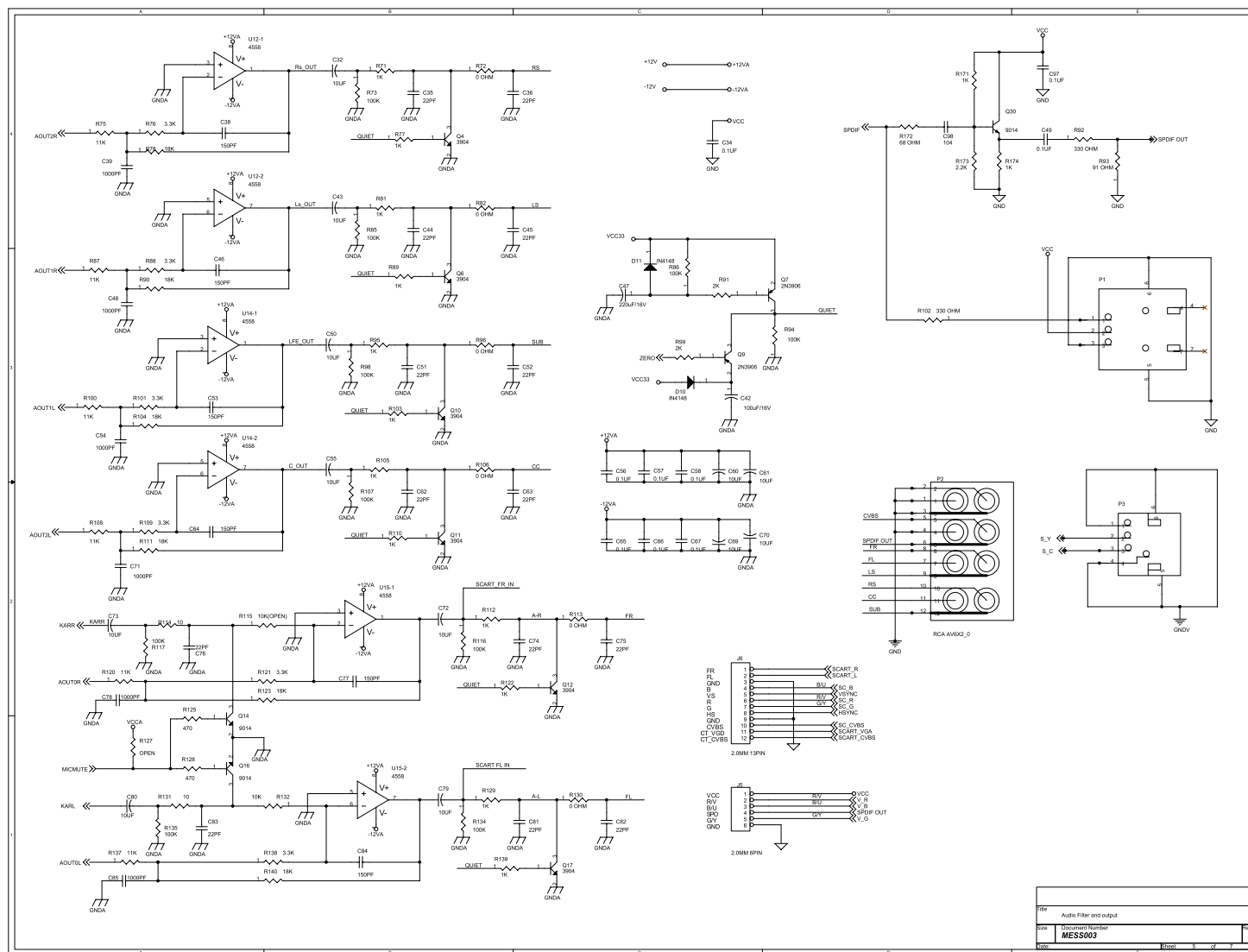
2) ES6603 and motor drivers



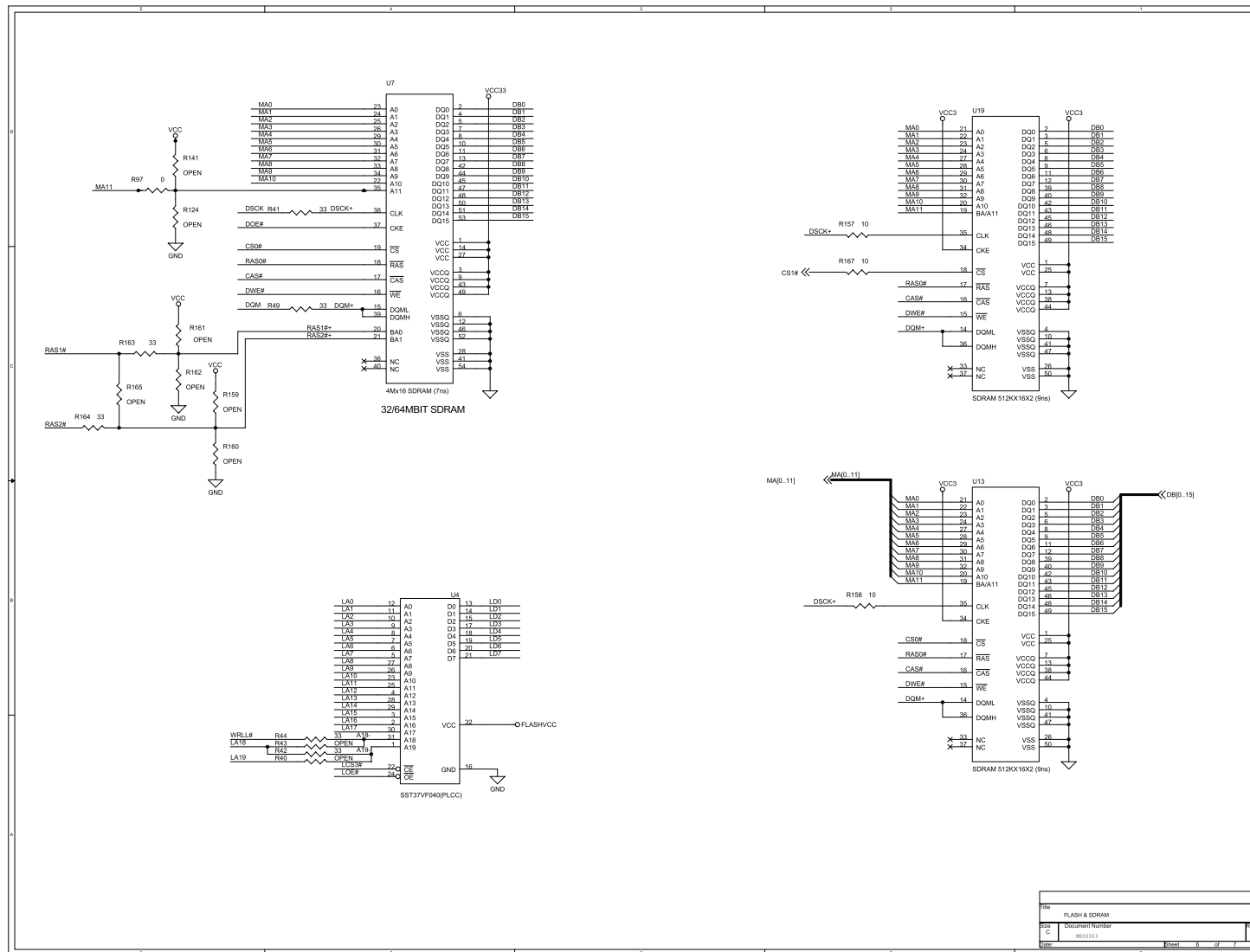
3) Audio and Power



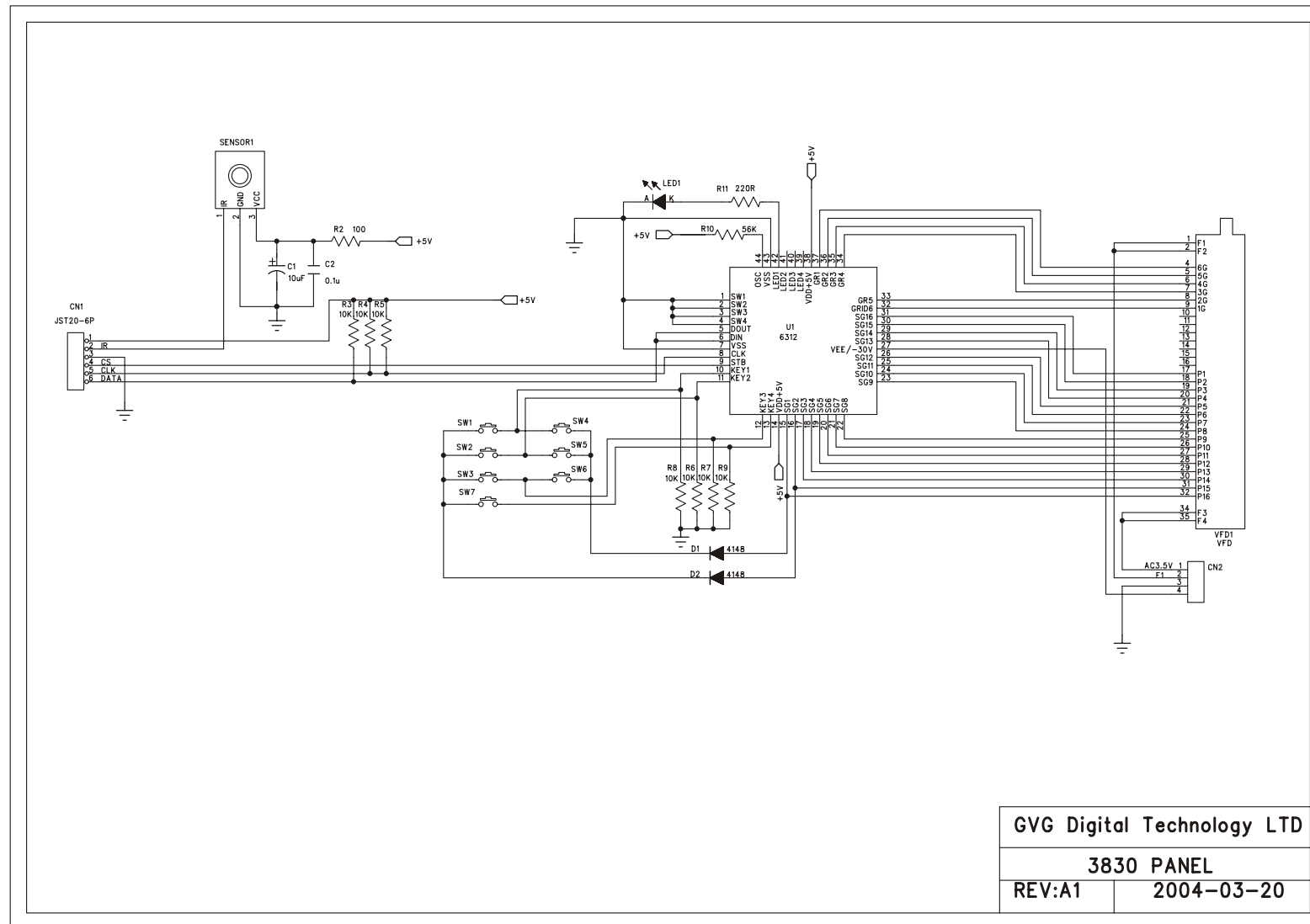
4) Audio filter and output



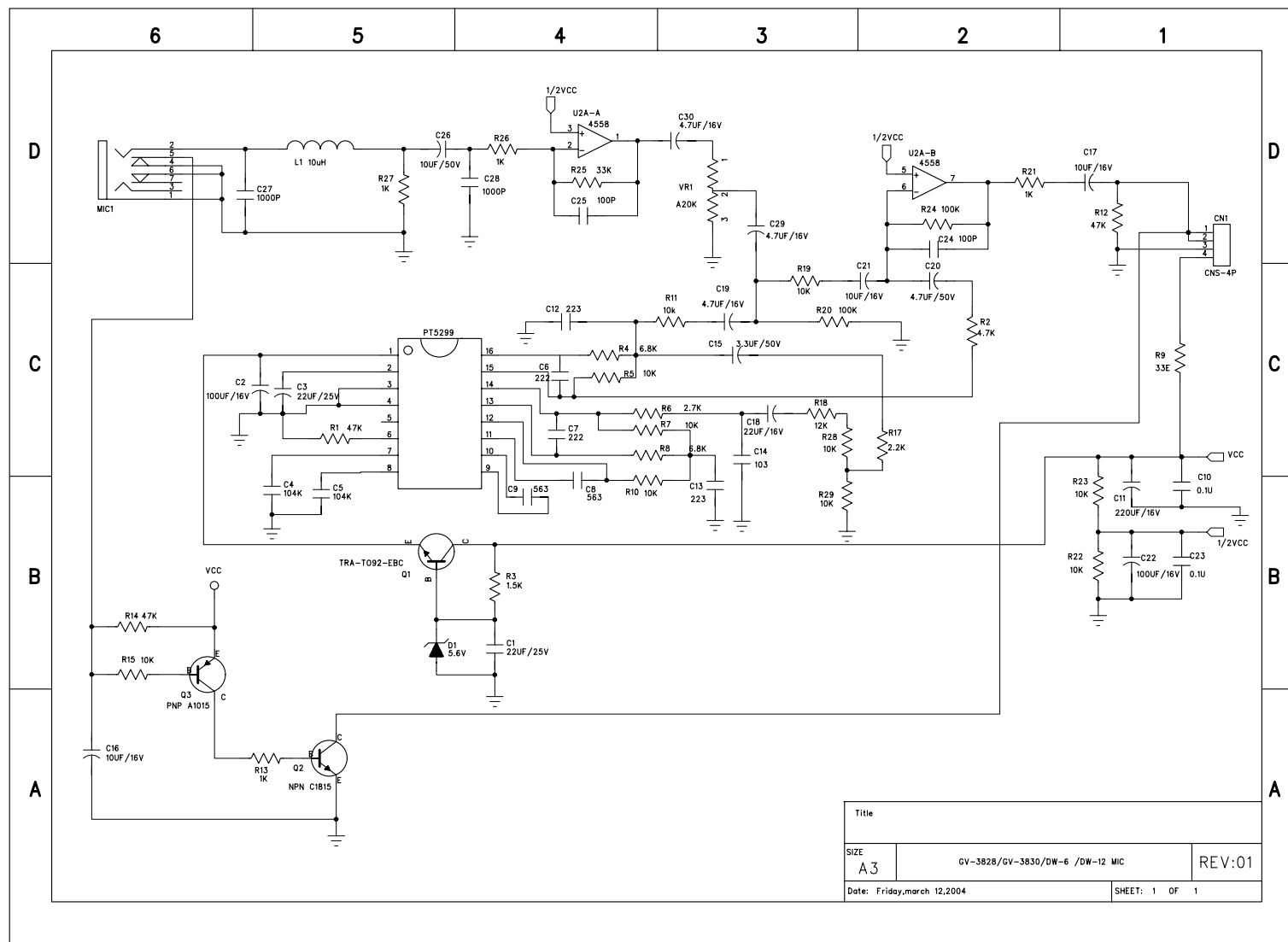
5) Flash & SDRAM



3. CONTROL BOARD SCHEMATIC DIAGRAM

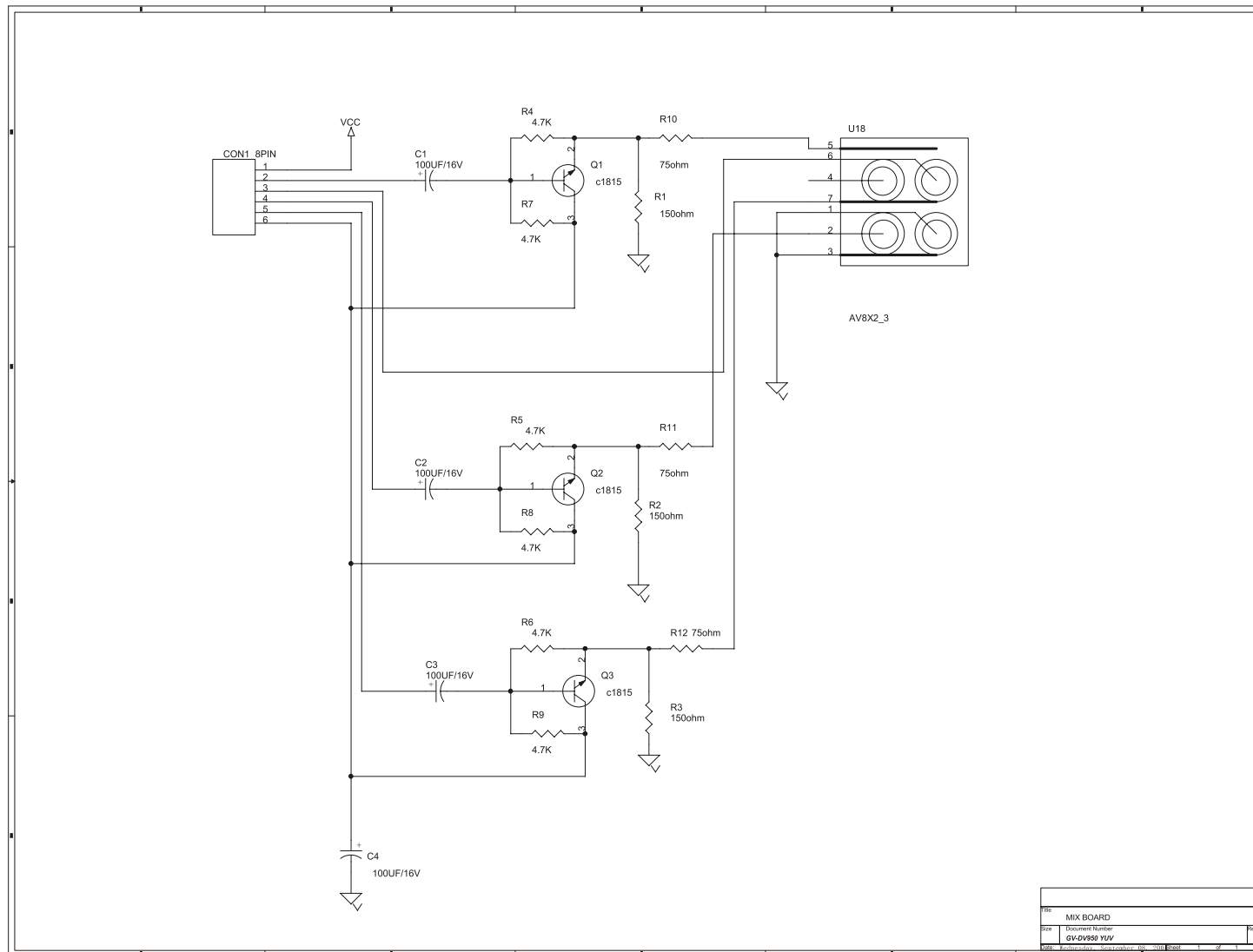


4. MICROPHONE BOARD SCHEMATIC DIAGRAM



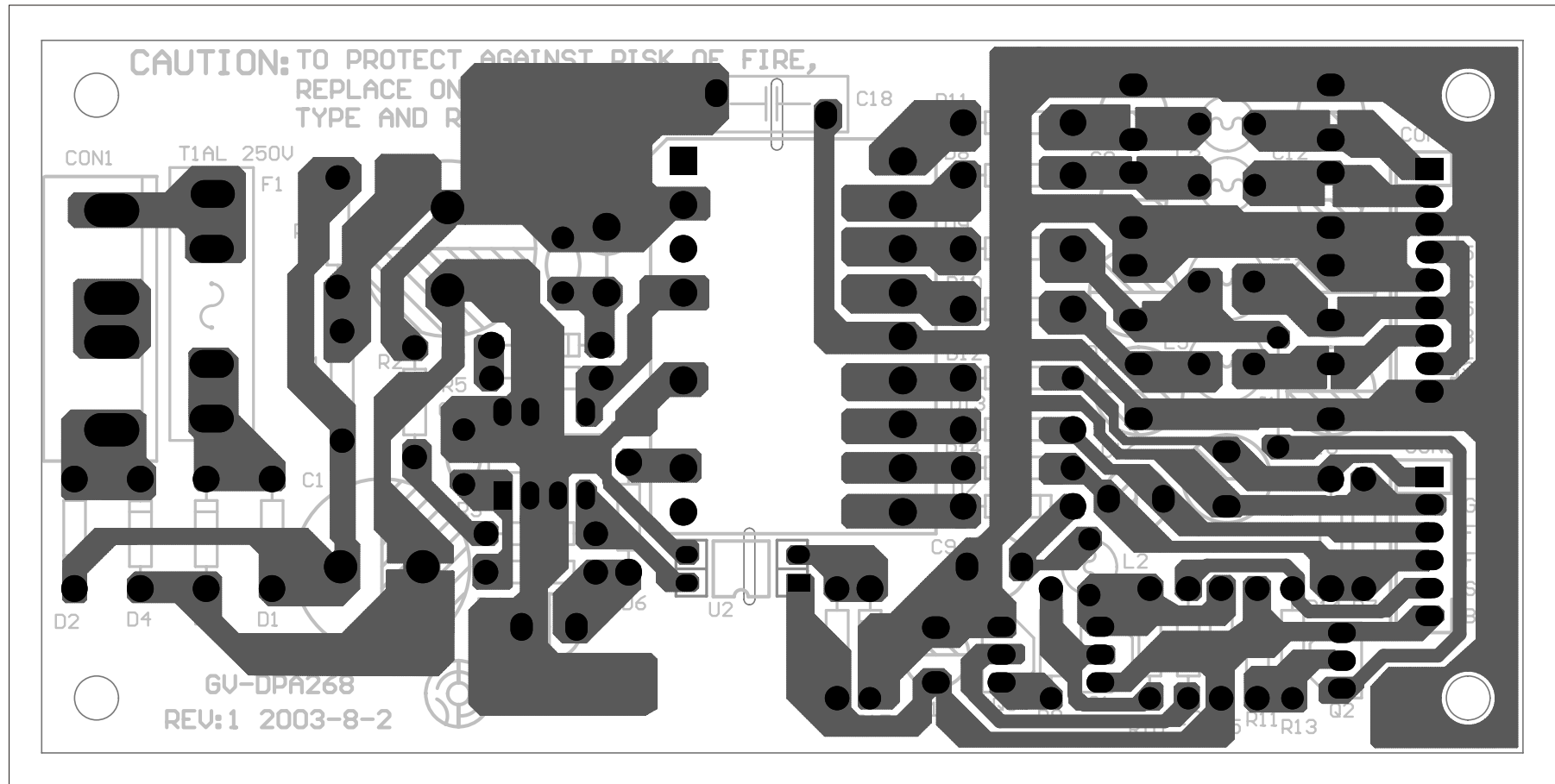
Title		
SIZE	GV-3828/GV-3830/DW-6 /DW-12 MIC	REV:01
Date: Friday,march 12,2004	SHEET: 1 OF 1	

5. YUV BOARD SCHEMATIC DIAGRAM

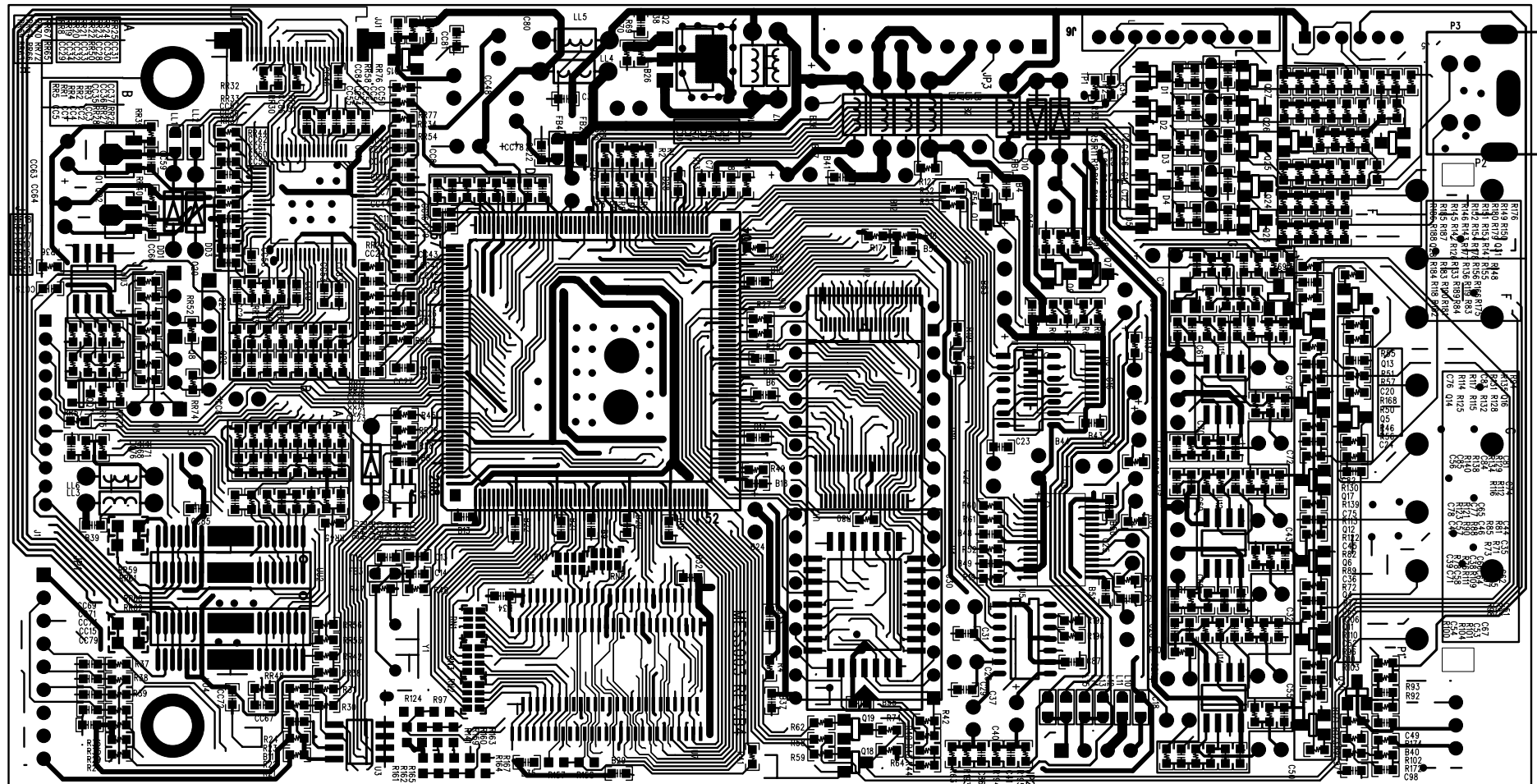


PCB CIRCUIT BOARD

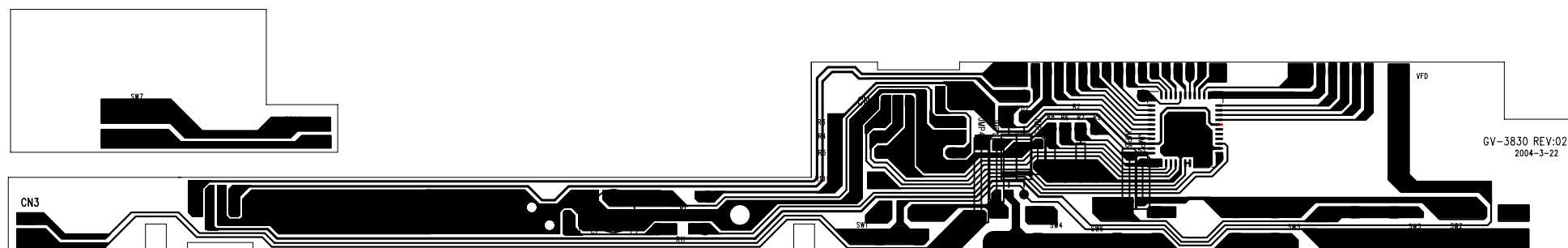
1. POWER SUPPLY BOARD



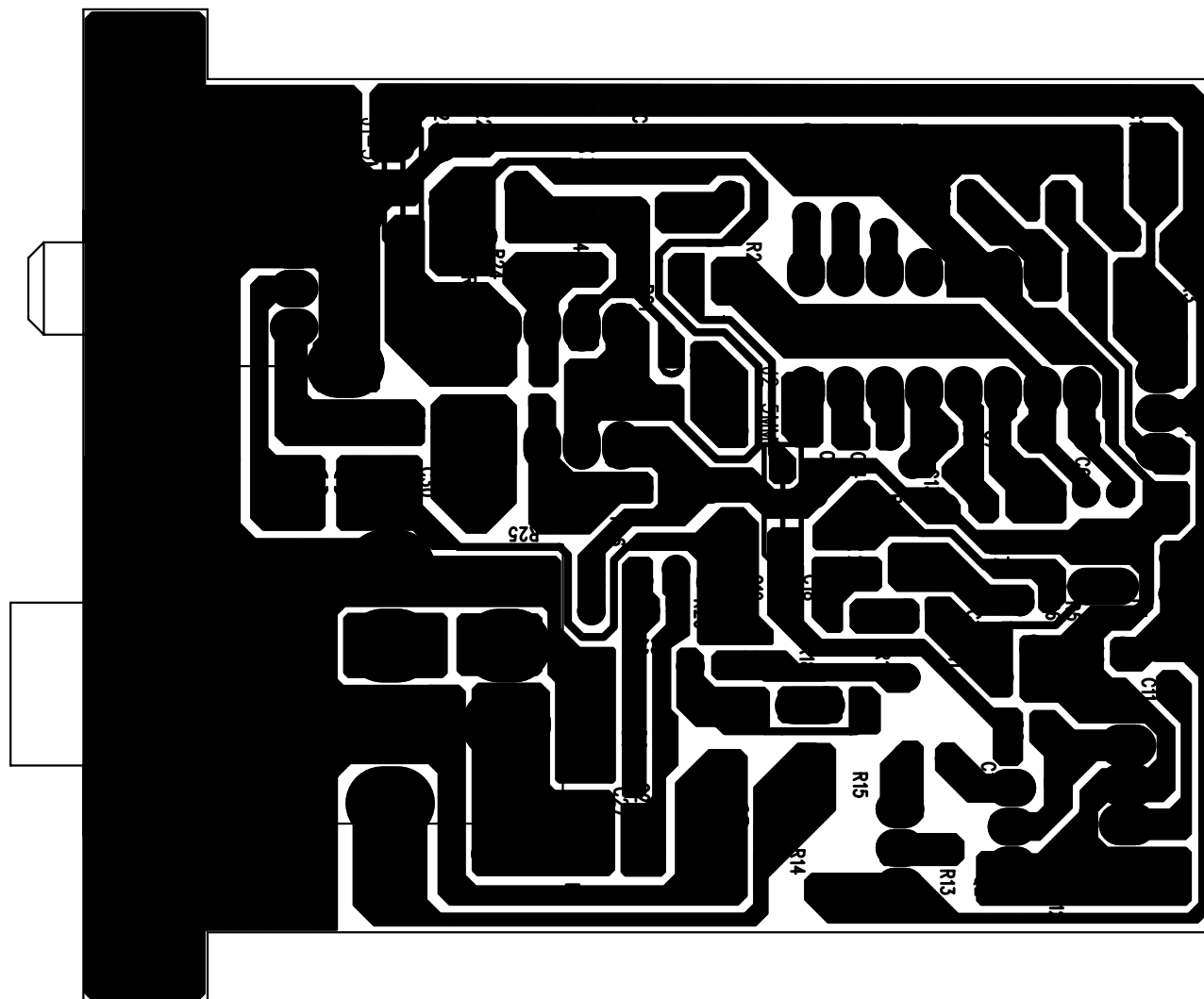
2. DECODE BOARD



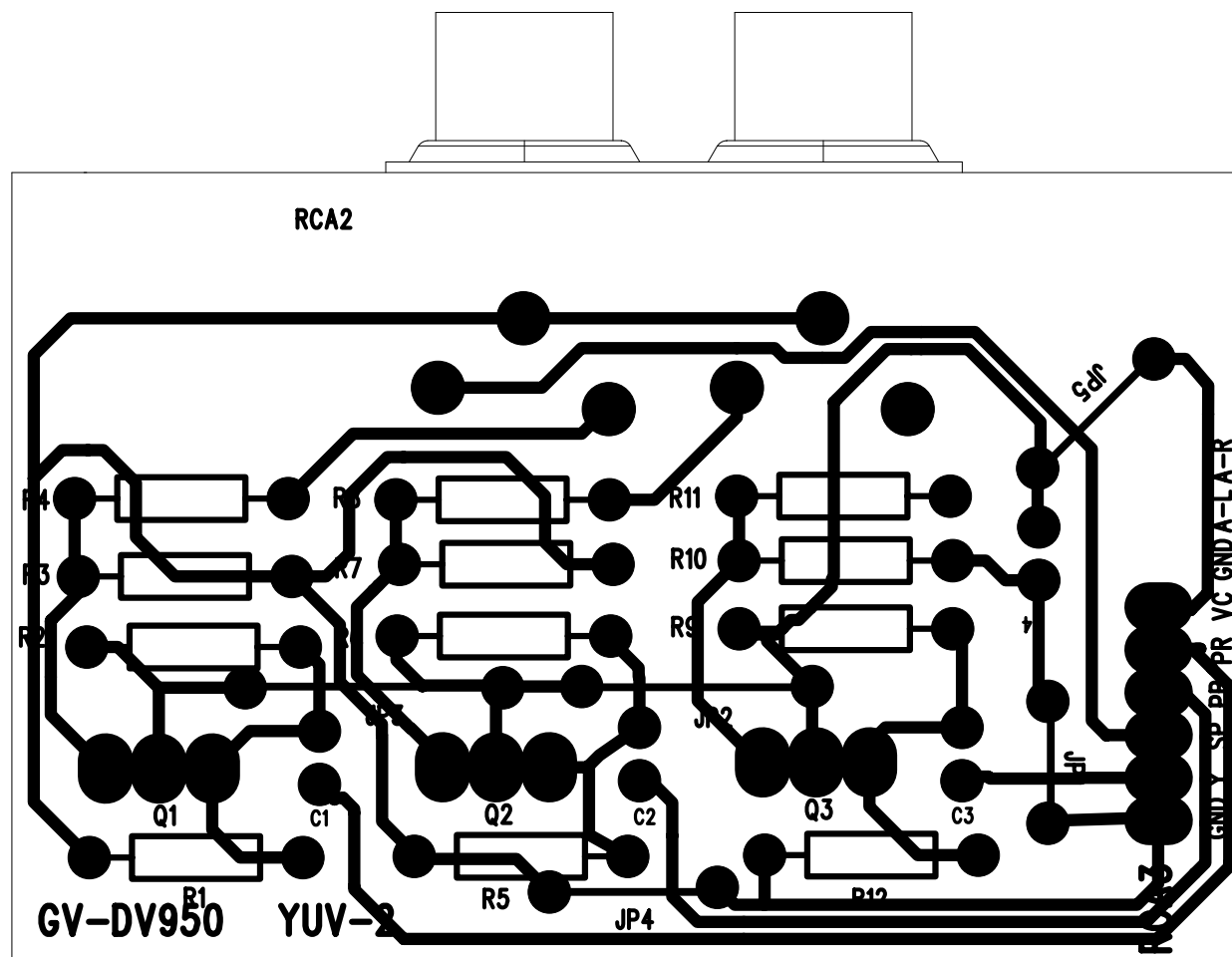
3. CONTROL BOARD



4. MICROPHONE BOARD



5. YUV VIDEO OUTPUT BOARD



INSTRUMENT DISASSEMBLY

Perform all disassembly procedures in the order presented.
When reassembling, use the reverse procedure.
Make sure that all leads/ wiring are routed correctly when reassembling.

A. TOP COVER REMOVAL

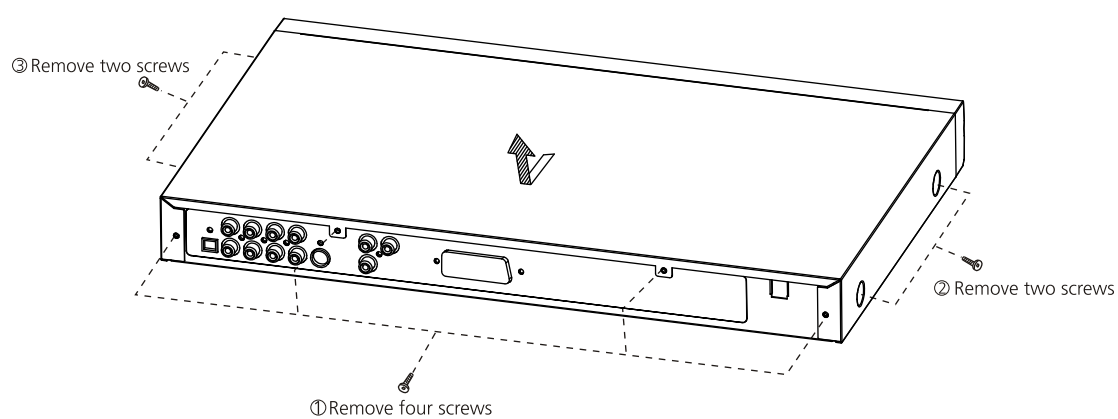
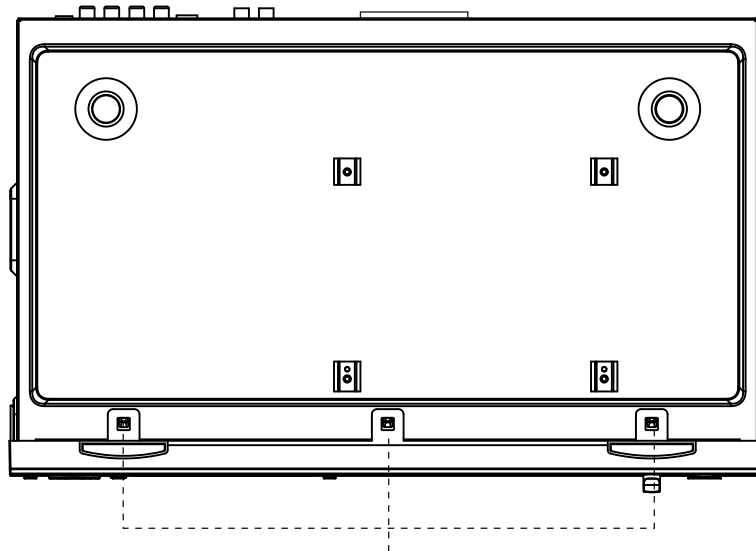
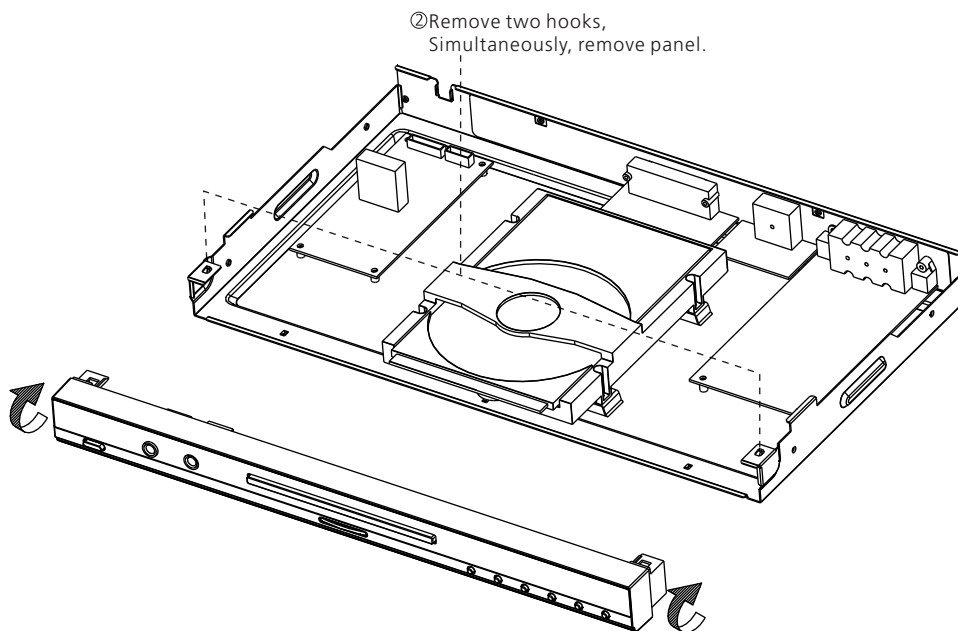


FIG. 1

B. FRONT PANEL DISASSEMBLY

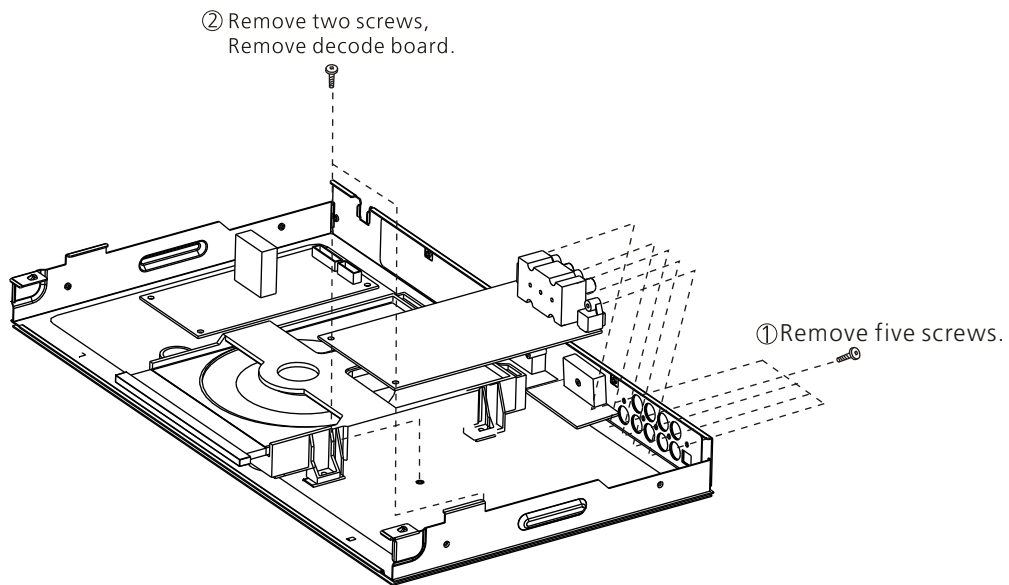
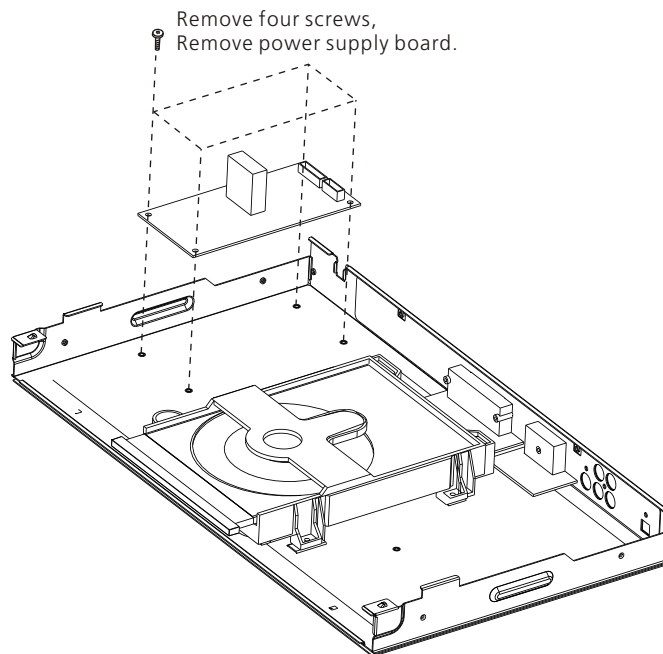


① Remove three hooks.



② Remove two hooks,
Simultaneously, remove panel.

FIG. 2

C. DECODE BOARD DISASSEMBLY**FIG. 3****D. POWER SUPPLY BOARD DISASSEMBLY****FIG. 4**

E. YUV OUTPUT BOARD DISASSEMBLY

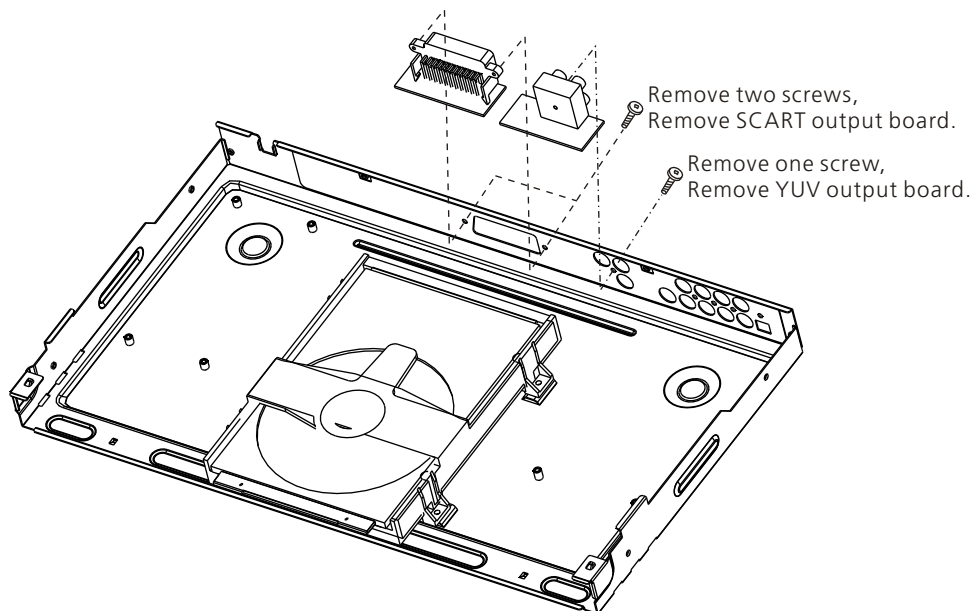


FIG. 5

F. DVD LOADER DISASSEMBLY

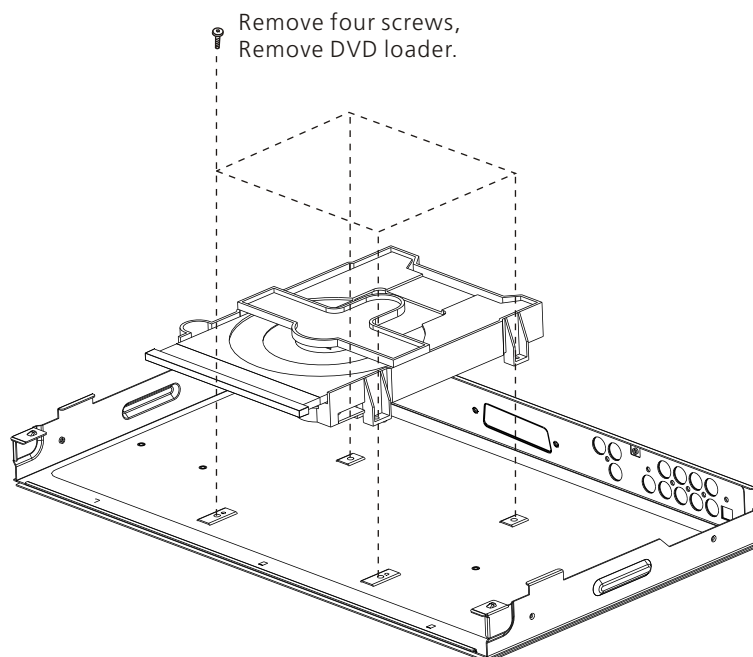


FIG. 6

PARTSLIST

Unit:pcs

No	Part name	Specification	Qty
1	R carbon film	1/6W 1K $\pm 5\%$	4
2	R carbon film	1/6W 4.7K $\pm 5\%$	1
3	R carbon film	1/6W 10K $\pm 5\%$	16
4	R carbon film	1/6W 12K $\pm 5\%$	1
5	R carbon film	1/6W 1.5K $\pm 5\%$	1
6	R carbon film	1/6W 15K $\pm 5\%$	1
7	R carbon film	1/6W 47K $\pm 5\%$	3
8	R carbon film	1/6W 51K $\pm 5\%$	1
9	R carbon film	1/6W 100K $\pm 5\%$	2
10	R carbon film	1/4W 33E $\pm 5\%$	1
11	R carbon film	1/4W 150E $\pm 5\%$	4
12	R carbon film	1/4W 4.7K $\pm 5\%$	7
13	R carbon film	1/4W 10K $\pm 5\%$	2
14	R carbon film	1/4W 1M $\pm 5\%$	2
15	R carbon film	1/6W 33E $\pm 5\%$	1
16	R carbon film	1/6W 6.8K $\pm 5\%$	2
17	R carbon film	2W 68K $\pm 5\%$	1
18	R carbon film	1/4W 100E $\pm 5\%$	1
19	R carbon film	1/4W 75E $\pm 5\%$	2
20	R carbon film	1/6W 220E $\pm 5\%$	1
21	R carbon film	2W 3.3E $\pm 5\%$	1
22	R carbon film	1/6W 2.7K $\pm 5\%$	1
23	R carbon film	1/6W 33K $\pm 5\%$	1
24	R carbon film	1/8W 2.2K $\pm 5\%$	1
25	R carbon film	1/6W 100E $\pm 5\%$	1
26	R Chip	1/16w 0E $\pm 5\%$ 0603	26
27	R Chip	1/16w 10E $\pm 5\%$ 0603	8
28	R Chip	1/16w 33E $\pm 5\%$ 0603	14
29	R Chip	1/16w 75E $\pm 5\%$ 0603	6
30	R Chip	1/16w100E $\pm 5\%$ 0603	6
31	R Chip	1/16w150E $\pm 5\%$ 0603	1
32	R Chip	1/16w240E $\pm 5\%$ 0603	28
33	R Chip	1/16w330E $\pm 5\%$ 0603	2
34	R Chip	1/16w470E $\pm 5\%$ 0603	2
35	R Chip	1/16w 1K $\pm 5\%$ 0603	25
36	R Chip	1/16w 2K $\pm 5\%$ 0603	1
37	R Chip	1/16w2.2K $\pm 5\%$ 0603	3
38	R Chip	1/16w3.3K $\pm 5\%$ 0603	10

PARTSLIST

No	Part name	Specification	Qty
39	R Chip	1/16w4.7K $\pm 5\%$ 0603	8
40	R Chip	1/16w 10K $\pm 5\%$ 0603	12
41	R Chip	1/16w 15K $\pm 5\%$ 0603	1
42	R Chip	1/16w 20K $\pm 5\%$ 0603	1
43	R Chip	1/16w 22K $\pm 5\%$ 0603	11
44	R Chip	1/16w100K $\pm 5\%$ 0603	11
45	R Chip	1/16w390E $\pm 5\%$ 0603	1
46	R Chip	1/16w 91E $\pm 5\%$ 0603	1
47	R Chip	1/16w6.8K $\pm 5\%$ 0603	6
48	R Chip	1/16w 1M $\pm 5\%$ 0603	1
49	R Chip	1/16w 68K $\pm 1\%$ 0603	1
50	R Chip	1/16w 33K $\pm 5\%$ 0603	1
51	R Chip	1/16w 75E $\pm 1\%$ 0603	1
52	R Chip	1/16w1.5K $\pm 5\%$ 0603	2
53	R Chip	1/16w 5.1K $\pm 5\%$ 0603	1
54	R Chip	1/16w 68E $\pm 5\%$ 0603	11
55	R Chip	1/16w1.2K $\pm 5\%$ 0603	1
56	R Chip	1/16w 56K $\pm 5\%$ 0603	2
57	R Chip	1/16w 12K $\pm 1\%$ 0603	1
58	R Chip	1/16w 100E $\pm 1\%$ 0603	1
59	R Chip	1/16w10E*4 $\pm 5\%$ 0603	5
60	R Fuse	1/4W 0.22E $\pm 5\%$	1
61	Pot	R0903NE-F20-C20K 3pin	1
62	C Cera AC	250V2200PF $\pm 20\%$ Y1	1
63	C Cera	563 50V $\pm 10\%$	2
64	C Cera	102 50V $\pm 10\%$	2
65	C Cera	101 50V $\pm 10\%$	2
66	C Cera	104 50V $\pm 10\%$ 5	5
67	C Cera	1KV4700PF $\pm 10\%$ Y5P	1
68	C Cera	103 50V $\pm 10\%$	1
69	C Cera	222 50V $\pm 10\%$	2
70	C Cera	223 50V $\pm 10\%$	2
71	C Cera	104 50V -20%+80%	1
72	C Electro	50V 4.7UF $\pm 20\%$ D5	5
73	C Electro	50V 10UF $\pm 20\%$	4
74	C Electro	16V 220UF $\pm 20\%$ D6	2
75	C Electro	16V 47UF $\pm 20\%$ D5	1
76	C Electro	10V 470UF $\pm 20\%$ D8	2

No	Part name	Specification	Qty
77	C Electro	10V 220UF ±20%	1
78	C Electro	16V 100UF ±20% D5	17
79	C Electro	50V 3.3UF ±20%	1
80	C Electro	25V 10UF ±20% D5	26
81	C Electro	25V 22UF ±20% D5	3
82	C Electro	25V 47UF ±20% D5	2
83	C Electro	50V 100UF ±20% D8	1
84	C Electro	16V 220UF ±20% D6 105°C	2
85	C Electro	10V 1000UF ±20% D8 105°C	2
86	C Electro	16V 100UF ±20% D6*8	1
87	C Electro	400V 22UF ±20% D16x22	2
88	C Chip	22P 50V ±10% 0603	16
89	C Chip	102 50V ±10% 0603	9
90	C Chip	121 50V ±10% 0603	1
91	C Chip	101 50V ±10% 0603	7
92	C Chip	104 25V ±10% 0603	71
93	C Chip	471 50V ±10% 0603	12
94	C Chip	153 50V ±10% 0603	2
95	C Chip	333 50V ±10% 0603	1
96	C Chip	103 50V ±10% 0603	2
97	C Chip	1U 10V ±10% 0603	5
98	C Chip	68P 50V ±10% 0603	1
99	C Chip	472 50V ±10% 0603	2
100	C Chip	473 50V ±10% 0603	2
101	C Chip	222 50V ±10% 0603	4
102	C Chip	682 50V ±10% 0603	2
103	C Chip	224 10V ±10% 0603	1
104	C Chip	152 50V ±10% 0603	6
105	C Chip	27P 50V ±5% 0603	2
106	C Chip	20P 50V ±5% 0603	1
107	C Chip	33P 50V ±5% 0603	3
108	C Chip	161 50V ±5% 0603	1
109	C Chip	47P 25V ±5% 0603	1
110	C Chip	821 25V ±5% 0603	1
111	Bead core	RH3.5*4.7*0.8	10
112	Coil chip	(0805)3.3UH	1
113	Coil	1A 10uH	2
114	Bead core	0.2A3.3uH	2

PARTSLIST

No	Part name	Specification	Qty
115	Bead core Chip	(0805) FB	8
116	Coil chip	2.4UH $\pm$ 10% 0805	5
117	Coil	1mH 200mA	1
118	Power Trans	GVG-TNY268M-A	1
119	Diode	UF4004	4
120	Diode	1N4148	7
121	Diode	1N4007	5
122	Diode	1N5817	1
123	Diode Zener	5.6V 1/2W	1
124	Diode Zener	3.9V 1/2W	1
125	Diode Zener	3.3V 1/2W	1
126	LED	Blue,high bright Φ 3mm	1
127	Diode Schottky	SR260 2A60V	1
128	Diode Chip	BAT54S (SOT-23)	5
129	TR	C1815 β =100~300	3
130	TR	2SA1015	1
131	TR	C1815 β =70~700	2
132	TR Chip	2N3904	11
133	TR Chip	9015	2
134	TR Chip	2N3906 (SOT23)	8
135	TR Chip	9014 (SOT23)	3
136	TR Chip	2SB1132 (SOT-89)	2
137	IC	PT6312LQ	1
138	IC	TP5299P	1
139	IC	F4558N (DIP)	1
140	IC	F4558S (SOP)	3
141	IC	ES6603 TQFP64	1
142	IC	HY57V641620HGT-H	1
143	IC	TNY268P	1
144	IC	AMS1117-ADJ (SOT-223)	1
145	IC	G690L438TX2 SOT-23	1
146	IC	A29800TV-70 AMIC 5V	1
147	IC	AM5868S	1
148	IC	S524C20D21-SCT0 (SOP)	1
149	IC	DA1196H SO-28	1
150	IC	ES6629 PQFP208	1
151	X-tal	27MHz 27P (HC-49/S)	1
152	IC photo coupler	PC817B	1

No	Part name	Specification	Qty
153	VFD	Hualian HL-D592E	1
154	Tac-switch	6*6*5	7
155	Battery	7# English	2
156	PCB	GV-DV950 YUV-2	1
157	PCB	GV-DPATNY268-1 power pcb	1
158	PCB	GV-DMA-3828 Mic pcb	1
159	PCB	GV-3830 REV:02 Control pcb	1
160	PCB	GV-3830 SBY REV:02 Control pcb	1
161	PCB	SGVG002 REV:B1 SCART	1
162	PCB	MESS003 REV:B4 Mpeg	1
163	Ferrite core	Outside Φ 28mm inside Φ 16mm H:7.5mm	2
164	Ferrite core	outside Φ 22.5mm inside Φ 13.8mm H:6.4mm	1
165	Ferrite Core	Outside Φ 16mm inside Φ 12mm H:8mm	1
166	Connector wafer	XH-4Pin 2.54mm	2
167	Connector wafer	XH-6Pin 2.54mm	1
168	Scart jack	XH-21pin SCART	1
169	Mic Jack	Silver 7 pin	1
170	Connector wafer	XH-6Pin 2.0mm	1
171	Connector wafer	HOP1200/-24Pin 0.5mm axial	1
172	Connector wafer	XH-11Pin 2.0mm	1
173	Connector wafer	XH-9Pin 2.54mm	2
174	Connector wafer	XH-10Pin 2.0mm	1
175	Connector wafer	XH-2Pin 3.96mm	1
176	AV jack	AV8-8.4-13D-B	1
177	AV jack	AV3-8.4-10D	1
178	Optical jack	TX179AFT	1
179	S-video jack	DSW-007	1
180	Jumper	Pin distance :5mm	4
181	Jumper	Pin distance:6mm	3
182	Jumper	Pin distance:7mm	1
183	Jumper	Pin distance:8mm	2
184	Jumper	Pin distance:10mm	2
185	Jumper	Pin distance:12mm	1
186	Jumper	Pin distance:15mm	2
187	Jumper	Pin distance:20mm	1
188	Tie	Black 120mm	1
189	Tie	Nylon 80mm	4
190	Connector	2.54 one end 4P*320mm	1

PARTSLIST

No	Part name	Specification	Qty
191	Connector	2.54 9P*350mm	1
192	Connector	2.54 double end 4P/3P*600mm	1
193	Connector	2.0 double end 6P*60mm 3Pin open	1
194	Connector	No end 2P*120mm	1
195	Connector	2.54 one end 6P*270mm 2~3 pin crossed	1
196	Connector	2.0 double end 10P*220mm 4~5pin crossed with ferrite core	1
197	Connector	2.0 11P/9P*120mm open 10,11P,reversed	1
198	Power Cord	2pin VDE(Xiekang)(outside1.5m inside200+50mm holder15mm with ferrite core3*3)	1
199	AV Cable	Audio 4 pin ,white red , L:1.5m	1
200	AV Cable	Video 2 pin , yellow , L:1.5m	1
201	Sleeve	Φ1.5mm L:10mm	4
202	Fuse	1A 250V UL	1
203	Fuse case	Metal	2
204	Receiver	PIC-317LM	1
205	DVD loader	Shinwa slim SHD-2503CWJ-03 HOP-1200W(with bus wire0.5mm/24P 200mm)	1
206	Front panel	RDV-750(silver)	1
207	CD Door	MD 41817 CD door(silver)	1
208	Play knob	3830 (silver)	1
209	Standby knob	3830STANDBY (silver)	1
210	Tube	3830	1
211	Vol knob	3830(silver)	1
212	Window	For VFD RDV-750	1
213	Plastic base	3830LED base	1
214	Handle	plastic white for gift box	1
215	Top cover	3816(silver)	1
216	Bottom cover	3830-MTK1379(Shinwa loader)+268	1
217	Screw	BTPW3*8	4
218	Screw	BB3*8	11
219	Screw	BTPW3*6	8
220	Screw	BM3*6	6
221	Screw	BTPW3*8(Φ9.0mm)	2
222	Screw	BB3*8 Φ5	7
223	Screw	BB3*10 Φ5	1
224	Grounding washer	Φ3.2	1
225	Washer	Thickness:0.5mm Φ3mm	3
226	Metal base	3816 Front panel	1

PARTSLIST

No	Part name	Specification	Qty
227	Master box	RDV-750 (silver) 1/4	0.25
228	Gift box	RDV-750 (silver)	1
229	Pad Foam	DVD small 200*40*18mm	1
230	Pad Foam	3816 Left(new)	1
231	Pad Foam	3816 Right(new)	1
232	Poly bag	For set 480*580mm	1
233	PE bag	For user's manual 04*230*370mm	1
234	PE bag	For remocon 04*80*260mm	1
235	PE bag	For power cord 04*80*240mm	1
236	Masking Tape	10mm*15mm	1
237	Masking Tape	50mm*10mm	1
238	Serial No. label	RDV-750	3
239	Frangible label	ROLSEN	1
240	User's manual	RDV-750 (silver)2version	1
241	Additional page	ROLSEN after sale severice form	1
242	Warranty card	RDV-750(English,Russian)	1
243	Cushion	10x10x3mm(sticker)EVI	2
244	Cushion	10x10x8mm(sticker)EVI rigidity:50	1
245	Cushion	20*12*3mm(sticker)EVI rigidity:64	2
246	Cushion	25x20x13mm(sticker)EVI rigidity:50	1
247	Cushion	3816 Front leg 46.6*6.6*8mm(sticker) rigidity:64	2
248	Cushion	3816 Back leg Φ15.5mm Thickness 3mm(sticker)rigidity:64	2
249	Aluminum foil cushion	10x8x10mm(sticker)	1
250	PVC sheet	90x70x0.5mmPVC(sticker)	1
251	PVC sheet	146x64x0.5mmPVC(sticker)	1
252	PVC sheet	RDV-750 5.1CH Rear panel PVC sheet(sticker)	1
253	Mic pcb assy	GV-DMA3828-01	1
254	Control pcb assy	GV-DCA3830-02	1
255	SCART PCB Assy	ESS SCART-02	1
256	Power PCB Assy	GV-DPA268-10(NO STANDBY)	1
257	YUV PCB assy	GV-PDV950YUV10	1
258	Front panel assy	RDV-750 (silver)	1
259	MPEG board	RDV-750 ESS6629 ESS003-B4(5700232)	1
260	Remote control	RDV-750	1